# Contract Provisions

For Construction of:

# 2019 Flashing Yellow Arrow Signals Project

August 2019

CITY OF SAMMAMISH
PUBLIC WORKS DEPARTMENT
801 228th AVENUE SE
SAMMAMISH, WA 98075





# CONTRACT PROVISIONS for 2019 Flashing Yellow Arrow Signals Project

City of Sammamish King County, Washington Public Works Department 801 228th Avenue SE Sammamish, WA 98075 (425) 295-0500 FAX (425) 295-0600

Approved for construction

Andrew Zagars, P.E.

Date

City Engineer\*\*

Isabel Diaz, P.E.

Date

Project Manager

<sup>\*\*</sup>Pursuant to Chapter 6, Section 6.2 of the 2016 Public Works Standards, the signature of the City Engineer on these Contract Provisions shall serve as written approval for all variations to the Public Works Standards contained within this project.

### **TABLE OF CONTENTS**

PART 1	PROPOSAL INTRODUCTION	
	NOTICE TO CONTRACTORS	1-1
	BIDDER'S CHECKLIST	1-3
PART 2	PROPOSAL	
	PROPOSAL	2-1
	SCHEDULE OF PRICES	2-3
	BID SECURITY FORM	2-5
	ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA	2-6
	BIDDER INFORMATION AND SIGNATURE	2-7
	NON-COLLUSION AND DEBARMENT AFFIDAVIT	2-9
	MINIMUM WAGE AFFIDAVIT FORM	2-10
	STATEMENT OF BIDDER'S QUALIFICATIONS	2-11
	RESPONSIBLE BIDDER CRITERIA	2-13
PART 3	CONTRACT DOCUMENT FORMS	
	CONTRACT AGREEMENT	3-1
	CONTRACTOR'S RETAINAGE AGREEMENT	3-5
	LABOR AND MATERIAL PAYMENT BOND	3-7
	PERFORMANCE BOND TO THE CITY OF SAMMAMISH	3-9
PART 4	AMENDMENTS TO THE STANDARD SPECIFICATIONS	
PART 5	SPECIAL PROVISIONS	

#### **APPENDICES**

**Appendix A: Prevailing Wage Rates** 

**Appendix B: Standard Plans and Details** 

# PART 1 PROPOSAL INTRODUCTION

#### **NOTICE TO CONTRACTORS**

## CITY OF SAMMAMISH 2019 Flashing Yellow Arrow Signals Project

Sealed proposals will be received by the City Clerk up to 2:00 p.m. (local time) on September 5, 2019, for furnishing the necessary labor, materials, equipment, tools, and guarantees thereof to construct the 2019 FLASHING YELLOW ARROW SIGNALS PROJECT. Bids received after the time and date listed above will not be considered.

Sealed proposals should be addressed to the following:

City of Sammamish 801 228th Avenue SE Sammamish, WA 98075 Attn: City Clerk

This Contract provides for the installation and improvement of Flashing Yellow Arrow (FYA) left-turn signalization at ten (10) intersections within the City of Sammamish, King County.

- NE 8th Street & 242nd Avenue NE (Eastbound and Westbound)
- 228th Avenue NE / NE 4th Street (Northbound)
- 228th Avenue SE / SE 8th Street (Southbound) [Non-Peak Hours Only]
  - Revising Eastbound and Westbound to split phase (no FYA)
- SE Duthie Hill Road / Trossachs Boulevard SE / 275th Ave SE All approaches (Northbound, Southbound, Eastbound, and Westbound)
- Issaquah-Pine Lake Road SE / 230th Lane SE / Pine Lake Middle School (Northbound and Southbound)
- Issaquah-Pine Lake Road SE / SE Klahanie Boulevard (Northbound and Southbound)
- 228th Avenue SE / Issaguah-Pine Lake Road SE (Northbound)
- SE Issaquah-Beaver Lake Road / SE Duthie Hill Road (Eastbound)
- Issaquah-Pine Lake Road SE / SE 47th Way / 238th Way SE (Northbound and Southbound)
- Issaquah-Pine Lake Road SE / SE 48th Street (Northbound)

The project includes removal of existing equipment, installation of new signal controllers, new signal conductors, new conflict monitors, new 3- and 4-section signal heads with LED displays, signing associated with FYA operations, traffic control, and other work noted in these documents.

The work shall be completed within ninety (90 WORKING DAYS) working days after the commencement date stated in the Notice to Proceed. All bidding and construction shall be performed in compliance with the Contract Documents for this project and any addenda issued thereto which are on file at the office of the City Clerk, City Hall, City of Sammamish, Washington.

At the time and date stated above, the proposals will be publicly opened and read aloud. Proposals are to be submitted only on the form provided with the Specifications. All Proposals must be accompanied by a certified check, cashier's check, money order, or bid bond payable to the "City of Sammamish" of value not less than five percent (5%) of the total amount bid.

Plans, Specifications, addenda, Bidders list, and plan holders list for this Project are available through the City of Sammamish's on-line plan room at http://bxwa.com. Click on "Posted Projects"; "Public Works", "City of Sammamish", and "Projects Bidding". Bidders are required to register in order to receive automatic e-mail notification of future addenda and to be placed on the Bidders List. Contact Builders Exchange of Washington at 425-258-1303 should you require assistance.

Funding for this Project will be provided by the City of Sammamish. The City of Sammamish expressly reserves the right to reject any or all bids and to waive minor irregularities or informalities and to further make award of the Project to the lowest responsive, responsible bidder as it best serves the interest of the City.

Melonie Anderson City Clerk

Dates of Publication: Daily Journal of Commerce: August 19, 2019 and August 26, 2019

Seattle Times: August 19, 2019 and August 26, 2019

#### **BIDDER'S CHECKLIST**

The Bidder shall submit the following forms as part of the proposal. The

#### 1. REQUIRED FORMS

forms must be execute	ed in full and submitted with the Proposal.
Proposal	
Schedule of F	Prices
Bid Security I	Form
Acknowledge	ment of Receipt of Addenda
Bidder Inform	nation and Signature
Non-Collusio	n and Debarment Affidavit
Minimum Wag	ge Affidavit Form
	shall submit the following forms within 48 hours after the submit these forms may result in the Contracting Agency.
Statement of	Bidder's Qualifications
Responsible	Bidder Criteria

#### 2. CONTRACT DOCUMENT FORMS

The following forms (a., b., and c.) are to be executed and the following Certificates of Insurance (d. and e.) are to be provided after the Contract is awarded and prior to Notice to Proceed.

- a. Contract Agreement
- b. Performance Bond
- c. Labor and Material Payment Bond
- d. Certificate of Insurance
- e. Certificate of Builder's Risk "All Risk" Insurance

# PART 2 PROPOSAL

**Print Contractor Name** 

#### **PROPOSAL**

Honorable Mayor and Council City of Sammamish 801 228th Avenue NE Sammamish, WA 98075

This Contract provides for the installation and improvement of Flashing Yellow Arrow (FYA) left-turn signalization at ten (10) intersections within the City of Sammamish, King County.

- NE 8th Street & 242nd Avenue NE (Eastbound and Westbound)
- 228th Avenue NE / NE 4th Street (Northbound)
- 228th Avenue SE / SE 8th Street (Southbound) [Non-Peak Hours Only]
  - o Revising Eastbound and Westbound to split phase (no FYA)
- SE Duthie Hill Road / Trossachs Boulevard SE / 275th Ave SE All approaches (Northbound, Southbound, Eastbound, and Westbound)
- Issaquah-Pine Lake Road SE / 230th Lane SE / Pine Lake Middle School (Northbound and Southbound)
- Issaquah-Pine Lake Road SE / SE Klahanie Boulevard (Northbound and Southbound)
- 228th Avenue SE / Issaquah-Pine Lake Road SE (Northbound)
- SE Issaquah-Beaver Lake Road / SE Duthie Hill Road (Eastbound)
- Issaquah-Pine Lake Road SE / SE 47th Way / 238th Way SE (Northbound and Southbound)
- Issaquah-Pine Lake Road SE / SE 48th Street (Northbound)

The project includes removal of existing equipment, installation of new signal controllers, new signal conductors, new conflict monitors, new 3- and 4-section signal heads with LED displays, signing associated with FYA operations, traffic control, and other work noted in these documents.

All bidding and construction shall be performed in compliance with the Notice to Contractors, Bid Proposal, Plans, Specifications, and Contract for this project and any addenda issued thereto which are on file at the office of the City Clerk, City Hall, City of Sammamish, Washington.

It is understood herein that after the date and hour set for the opening of bids, no Bidder may withdraw its Proposal, unless the award of the Contract is delayed for a period exceeding forty (40) consecutive calendar days.

The undersigned has examined the site(s), local conditions, Addenda, Contract Provisions, Plans, and all applicable laws and ordinances covering the Work contemplated. In accordance with the terms, provisions, and requirements of the foregoing, all of their respective terms and conditions are incorporated herein by this reference and the following unit and lump sum prices are tendered as an offer to

#### **PROPOSAL – Continued**

**Print Contractor Name** 

perform the Work and furnish the equipment, materials, appurtenances, and guarantees, complete in place, in good working order.

The undersigned freely states that it is familiar with the provisions of the competitive bidding statutes of the State of Washington, and specifically the provisions of RCW Chapter 9.18, and certifies that with respect to this Proposal, there has been no collusion or understanding with any other person, persons, or corporation, to prevent or eliminate full and unrestricted competition among Bidders on this Project.

The undersigned agrees that in the event of contract award, it shall employ only Contractor and Subcontractors duly licensed by the State of Washington.

The undersigned agrees that the Owner reserves the right to reject any or all bids and to waive any minor informalities.

The undersigned hereby agrees that the Owner reserves the right to award the contract to the lowest responsible, responsive bidder whose Proposal is in the best interest of the Owner. The Owner will determine at the time of award of the Project which additives, if any, will be included in the Contract.

The undersigned agrees that the Owner is authorized to obtain reports from all references included herein.

I, the undersigned, hereby certify, under penalty of perjury under the laws of the State of Washington, on behalf of the firm identified below that, to the best of my knowledge and belief, this firm has NOT been determined by a final and binding citation and notice of assessment issued by the Washington State Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of RCW chapters 49.46, 49.48, or 49.52 within three (3) years prior to this project's bid solicitation date.

Very Truly Yours,

Print Company Name		
By (Print Name)		
By (Signature)		
Title		
Date		

**Print Contractor Name** 

#### **SCHEDULE OF PRICES**

#### NOTE:

- Unit prices for all items, all extensions, and the total amount bid must be shown.
- The project must be in its entirety, including all bid items and any bid additive bid items as specifically listed in the Proposal, in order to be considered a responsive bid.
- Where conflict occurs between the unit price and the total amount named for any item the unit price shall prevail, and totals shall be corrected to conform thereto.
- All entries must be typed or printed and entered in ink. Award of the Contract shall be based on the lowest, responsive bid.

(Standard Specifications and Special Provision references shown are provided for information only to assist bidders in the preparation of their proposal. Bidders shall not rely on this information and must thoroughly examine the contract requirements during the preparation of their proposal.)

Item No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
1.	MINOR CHANGE	1-04 SS	FA	1	\$35,000	\$35,000
2.	RECORD DRAWINGS	1-05 SP	LS	1		
3.	SPCC PLAN	1-07 SS	LS	1		
4.	MOBILIZATION	1-09 SS	LS	1		
5.	PROJECT TEMPORARY TRAFFIC CONTROL	1-10 SS	LS	1		
6.	UNIFORMED POLICE OFFICER	1-10 SP	HR	120		
7.	TRAFFIC SIGNAL SYSTEM - NE 8TH STREET & 242ND AVENUE NE	8-20 SP	LS	1		
8.	TRAFFIC SIGNAL SYSTEM - 228TH AVENUE NE & NE 4TH STREET	8-20 SP	LS	1		
9.	TRAFFIC SIGNAL SYSTEM - 228TH AVENUE SE & SE 8TH STREET	8-20 SP	LS	1		
10.	TRAFFIC SIGNAL SYSTEM - SE DUTHIE HILL ROAD & TROSSACHS BOULEVARD SE & 275TH AVE SE	8-20 SP	LS	1		

#### **PROPOSAL – Continued**

**Print Contractor Name** 

Item		Section		Approx.		
No.	Item With Unit Priced Bid	Reference	Unit	Quantity	Unit Price	Amount
11.	TRAFFIC SIGNAL SYSTEM - ISSAQUAH-PINE LAKE ROAD SE & 230TH LANE SE & PINE LAKE MIDDLE SCHOOL	8-20 SP	LS	1		
12.	TRAFFIC SIGNAL SYSTEM - ISSAQUAH-PINE LAKE ROAD SE & SE KLAHANIE BOULEVARD	8-20 SP	LS	1		
13.	TRAFFIC SIGNAL SYSTEM - 228TH AVENUE SE & ISSAQUAH-PINE LAKE ROAD SE	8-20 SP	LS	1		
14.	TRAFFIC SIGNAL SYSTEM - SE ISSAQUAH-BEAVER LAKE ROAD & SE DUTHIE HILL ROAD	8-20 SP	LS	1		
15.	TRAFFIC SIGNAL SYSTEM - ISSAQUAH-PINE LAKE ROAD SE & SE 47TH WAY & 238TH WAY SE	8-20 SP	LS	1		
16.	TRAFFIC SIGNAL SYSTEM - ISSAQUAH-PINE LAKE ROAD SE & SE 48TH STREET	8-20 SP	LS	1		

<sup>\*</sup>Note: Contractor is advised to be familiar with Washington State Revenue Rule 171 as no separate, distinct sales tax monies will be reimbursed to the Contractor. See Special Provisions 1-07.2(1).

Drint	Contractor Name	
	COHILACIOI NAIDE	

### **BID SECURITY FORM**

Herewith find deposit in the form of a amount of \$			
bid.			
	Sign h	nere	
Know All Men by These Presents:			
That we,			, as Principal, and
the City of Sammamish, as Obligee, i	n the pena	al sum of	
Dollars, for the payme			
their heirs, executors, administrators,	successo	ors and assigns, jointly	and severally, by these
presents.			
The condition of this obligation is sucl	n that if th	e Obligee shall make an	v award to the Principal
for		•	•
bid made by the Principal therefor, an			
with the Obligee in accordance with the	ne terms o	of said proposal or bid a	nd award and shall give
bond for the faithful performance then	eof, with	Surety or Sureties appre	oved by the Obligee; or
if the Principal shall, in case of failure	to do so,	pay and forfeit to the Ol	bligee the penal amount
of the deposit specified in the call for b	oids, then	this obligation shall be r	null and void; otherwise
it shall be and remain in full force and		•	
the Obligee, as penalty and liquidated	damages	, the amount of this bor	nd.
SIGNED, SEALED AND DATED TH	HIS	DAY OF	, 20
	Princi	pal	
	Surety	У	
Received return of deposit in the sum	of \$		

Print Contractor Name	

#### **ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA**

By signing below, Bidder acknowledges receipt and understanding of the following Addenda to the Contract Documents:

Addendum No.	Date of Receipt	Signature
1		
2		
3		
4		
5		
6		

#### NOTE:

Failure to acknowledge receipt of Addenda may be considered as an irregularity in the Bid Proposal and the City reserves the right to determine whether the Bid will be disqualified.

Print	Contractor	Name

#### **BIDDER INFORMATION AND SIGNATURE**

The Bidder proposes to accept as full payment for the Work proposed herein, the amount computed under the provisions of the Contract Provisions. The undersigned Bids for the following described Project:

#### 2019 FLASHING YELLOW ARROW SIGNALS PROJECT

2019 FLASHING TELLOV	W ARROW SIGNALS PROJECT
The party by whom this Bid is submitted an event the award is made to this party, is:	d by whom the Contract will be entered into, in the
Contractor (Firm Name)	Signature
Address	Name (Print) & Title
Phone Number	Date of Signing
Contractor's Washington State License Number	(Indicate whether contractor is partnership, joint venture, corporation, or sole proprietorship)*
*If Bidder is a corporation, write State of Inconames of all partners.	corporation under signature. If partnership, give full
	nd/or Manager of the Bidding corporation, or the in this Bid as partners or principals, are as follows:
Name	Address
	1

#### **PROPOSAL – Continued**

Print	Contractor	Name

IF SOLE PROPRIETOR OR PARTNERSHIP	
IN WITNESS hereto, the undersigned has se 20	t his (its) hand this day of
	Signature of Bidder
	Title
IF CORPORATION	
	corporation has caused this instrument to be is day of
Attest:	Name of Corporation
Secretary	by
	Title
Sworn to me before me this day o	
Notary Public in and for the State of Washington Residing at	<u>-</u> ·
NOTES	_

#### NOTES:

If the Bidder is a co-partnership, give firm name under which business is transacted; Proposal must be executed by a partner. If the Bidder is a corporation, Proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign).

**Print Contractor Name** 

#### **NON-COLLUSION AND DEBARMENT AFFIDAVIT**

* STATE OF WASHINGTON	)	
** COUNTY OF	_)	
I, the undersigned, an authorized duly sworn on oath do hereby certify that s or indirectly, entered into any agreement, p competitive bidding in connection with the	aid person(s), firm, association or corporarticipated in any collusion, or otherwise	taken any action in restraint of free
I further certify that, except as not capacity associated therewith or any posi suspension, debarment, voluntary exclusion suspended, debarred, voluntarily excluded not have a proposed debarment pending; are said person, firm, association or corporation misconduct within the past 3 years.	on, or determination of ineligibility by or determined ineligible by any federal and has not been indicted, convicted, or ha	deral funds; is not currently under any federal agency; has not beer gency within the past 3 years; does d a civil judgment rendered agains
I further acknowledge that by signing the s to the provisions of this affidavit.	ignature page of the proposal, I am deen	ned to have signed and have agreed
	Name of Project	
	Name of Bidder's Firm	
Signature of	of Authorized Representative of Bidder	
Printed Name	e of Authorized Representative of Bidder	<del>.</del>
	Date	
I certify that I know or have satisfactory ev and said person acknowledged that (he/she) act for the uses and purposes mentioned in	signed this instrument and acknowledged	he person who appeared before me I it to be (his/her) free and voluntary
Dated		
	Notary Public in and for the S of Washington residing at	
	Notary (print):	
NOTE.	My appointment expires:	

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate above to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

- A suspending or debarring official may grant an exception permitting a debarred, suspended, or excluded person to participate in a particular transaction upon a written determination by such official stating the reason(s) for deviating form the Presidential policy established by Executive order 12549..." (49 CFR Part 29 Section 29.215).
- If notarization of proposal takes place outside of Washington State, DELETE WASHINGTON, and enter appropriate State.
- Fill in county where notarization of proposal takes place.

Print Contractor Name

### **MINIMUM WAGE AFFIDAVIT FORM**

STATE OF WASHINGTON )	SS
COUNTY OF KING )	
performance of the work of this project employed in the performance of suct the minimum rate of wages as specific properties.	ally sworn, deposed, say and certify that in connection with the ect, I will pay each classification of laborer, workman, or mechanic ch work; not less than the prevailing rate of wage or not less than ecified in the principal contract; that I have read the above and know the contents thereof and the substance as set forth therein is
	Name of Project
	Name of Bidder's Firm
	Name of bluders film
Signature	e of Authorized Representative of Bidder
Printed Nar	me of Authorized Representative of Bidder
	Date
	Cactory evidence that is the person who erson acknowledged that (he/she) signed this instrument and the and voluntary act for the uses and purposes mentioned in the
Dated	
	Notary Public in and for the State of Washington residing
at	Notary
(print):	
	My appointment expires:

Print	Contractor	Name
	CALIFICACION	I VALUE

### **STATEMENT OF BIDDER'S QUALIFICATIONS**

Name of Firm:
Address:
Telephone No
Contact Person for this Project:
Number of years the Contractor has been engaged in the construction business unde the present firm name, as indicated above:
Gross dollar amount of work currently under contract:
Gross dollar amount of contracts currently not completed:
General character of work performed by the firm:
List all of the projects over one-half million dollars total of a similar nature which have been completed by the Contractor within the last five (5) years and the gross dollars

List all of the projects over one-half million dollars total of a similar nature which have been completed by the Contractor within the last five (5) years and the gross dollar amount of each project, together with the Owner's name and phone number, and the Engineer's name.

Project Name	Amount	Owner	Phone	Engineer's Name

#### **PROPOSAL – Continued**

<b>-</b> · ·	<b>^</b> , ,		
Print	Contract	ar Name	

List five major pieces of equipment which are anticipated to be used on this project by the Contractor and note which items are owned by the Contractor and which are to be leased or rented from others:

1
2
3
4
5
Bank Reference:
How many general superintendents or other responsible employees in a supervisory cosition do you have at this time, and how long have they been with the firm?
dentify who will be the general superintendent or project superintendent on this Project and list the number of years with the firm.
Have you changed bonding company within the last three (3) years?
Have you ever been sued or engaged in arbitration by the Owner or have you evesued or demanded arbitration from an Owner on any public works contract for a special utility district, private utility company, municipality, county or state
government? For what reason?
Disposition of case, if settled:
Do you have any outstanding payments due to the Department of Revenue?
Bidder agrees that the Owner shall retain the right to obtain any and all credit reports
Yes: No

Print Contractor Name

#### RESPONSIBLE BIDDER CRITERIA

In accordance with RCW 39.04, before award of a Public Works Contract, a Bidder must meet the following responsibility criteria to be considered a responsible Bidder and qualified to be awarded a Public Works Project. The Bidder must:

- 1. At the time of Bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW
- 2. Have a current state unified business identifier (UBI) number
- 3. If applicable, have industrial insurance coverage for the Bidder's employees working Washington as required in Title 51 RCW
- 4. If applicable, have an employment security department number as required in Title 50 RCW
- 5. If applicable, have a state excise tax registration number as required in Title 82 RCW
- 6. Not be disqualified from Bidding on any Public Works Contract under RCW 39.06.010 or 39.12.065(3)
- 7. As of July 1, 2019, according to RCW 39.04.350 awarding agencies must verify that a bidder has received training on prevailing wage and public works requirement or that the bidder is exempt.

In accordance with RCW 39.06, a Public Works Contractor must verify responsibility criteria for each first tier Subcontractor, and a Subcontractor of any tier that hires other Subcontractors must verify responsibility criteria for each of its Subcontractors, Verification shall include that each Subcontractor, at the time of Subcontract execution, meets the responsibility criteria and possesses an electrical contractor license, if required by RCW 19.28, or an elevator contractor license, if required by RCW 70.87. This verification requirement, as well as the responsibility criteria, must include every Public Works Contract and subcontract of every tier.

Providing the following information is **MANDATORY** in order to meet "Responsible Bidder" requirements. Failure to provide this information may disqualify your Bid as being "**Non-Responsive**". If your business is not required to have one of the following numbers, provide an explanation.

1.	State of Washington Contractor Registration No.
2.	State of Washington Unified Business Identifier No.
3.	Employment Security Department No
4.	State Excise Tax Registration No.
5.	Is the payment of Worker's Compensation (Industrial Insurance) Premiums current? If your business does not have a Worker's Comp account with the WA State Dept. of Labor & Industry please explain why.  [ ] Yes [ ] No (If No, you are not eligible to bid on this project [ ] No Account – Explain why:

PROF	POSAL – Continued	
		Print Contractor Name
6.	Are you disqualified from Bidding on Public Yes (If Yes, you are not eligible to Bid	y e
	[ ] No	,

# PART 3 CONTRACT DOCUMENT FORMS

CONTRACT	NUMBER
----------	--------



801 228<sup>th</sup> Avenue SE • Sammamish, WA 98075 Phone: 425-295-0500 • Fax: 425-295-0600 Web: www.sammamish.us

CONTRACT AGREEMENT PUBLIC WORKS						
PROJECT NAME: 2019 Flashing Yellow Arrow Signals Project						
CONTRACT AMOUNT \$:						
This Agreement made and entered into thisday of, 20 by and between the City of Sammamish, Washington, a municipal corporation of the State of Washington, hereinafter referred to as "City," andhereinafter referred to as the "Contractor".						
WITNESSETH:						

1) The Contractor shall within the time stipulated (to-wit:) within 90 working days from date of commencement hereof as required by the Contract,, of which this Agreement is a component part) perform all the work and services required to be performed and provide and furnish all of the labor, materials, appliances, machines, tools, equipment, utility and transportation services necessary to perform the Contract, and shall complete the construction and installation work in workmanlike manner, to the satisfaction and approval of the City's Public Works Director as being in such conformity with the plans, specifications and all requirements of or arising under the Contract in connection with the City's project.

#### 2019 FLASHING YELLOW ARROW SIGNALS PROJECT

This Contract provides for the installation and improvement of Flashing Yellow Arrow (FYA) left-turn signalization at ten (10) intersections within the City of Sammamish, King County.

- NE 8th Street & 242nd Avenue NE (Eastbound and Westbound)
- 228th Avenue NE / NE 4th Street (Northbound)
- 228th Avenue SE / SE 8th Street (Southbound) [Non-Peak Hours Only]
  - Revising Eastbound and Westbound to split phase (no FYA)
- SE Duthie Hill Road / Trossachs Boulevard SE / 275th Ave SE All approaches (Northbound, Southbound, Eastbound, and Westbound)
- Issaquah-Pine Lake Road SE / 230th Lane SE / Pine Lake Middle School (Northbound and Southbound)
- Issaquah-Pine Lake Road SE / SE Klahanie Boulevard (Northbound and Southbound)
- 228th Avenue SE / Issaguah-Pine Lake Road SE (Northbound)
- SE Issaquah-Beaver Lake Road / SE Duthie Hill Road (Eastbound)
- Issaquah-Pine Lake Road SE / SE 47th Way / 238th Way SE (Northbound and Southbound)
- Issaquah-Pine Lake Road SE / SE 48th Street (Northbound)

CONTRA	ACT	Νl	JM	BER
--------	-----	----	----	-----

The project includes removal of existing equipment, installation of new signal controllers, new signal conductors, new conflict monitors, new 3- and 4-section signal heads with LED displays, signing associated with FYA operations, traffic control, and other work noted in these documents.

All the foregoing shall be timely performed, furnished, constructed, installed and completed in strict conformity with the plans and specifications, including any and all addenda issued by the City and all other documents hereinafter enumerated, and in full compliance with all applicable codes, ordinances and regulations of the City of Sammamish and any other governmental authority having jurisdiction there over.

- 2) The aforesaid Contract, entered into by the acceptance of the Contractor's bid and signing of this Agreement, consists of the following documents, all of which are component parts of said Contract and as fully a part thereof as if herein set out in full, and if not attached, as if hereto attached.:
  - a) This Agreement
  - b) Instruction to Bidders
  - c) Project Proposal
  - d) Specifications
  - e) Maps and Plans
  - f) Bid
  - g) Advertisement for Bids
  - h) Special Provisions, if any
  - i) All documents required under this Agreement, including but not limited to:
  - j) Documentation evidencing insurance,
  - k) Copy of Contractor's state contractor license and UBI number
  - I) Copy of Contractor's business license
  - m) Employment Security Dept #, if applicable
  - n) State Excise Tax Registration, if applicable
  - o) Industrial Insurance coverage, if applicable
  - p) Proof of required Prevailing Wage/Public Works Training (per RCW 39.04.350 effective 7/1/2019 or proof of exemption.
  - q) Addenda, if any
  - r) And all modifications or changes issued pursuant to the Contract Documents
- 3) If the Contractor refuses or fails to prosecute the work or any part thereof, with such diligence as will insure its completion within the time specified in this Contract, or any extension in writing thereof, or fails to complete said work with such time, or if the Contractor shall be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver shall be appointed on account of the Contractor's insolvency, or if he or any of his subcontractors should violate any of the provisions of this Contract, the City may then serve written notice upon him and his surety of its intention to terminate the Contract, and unless within ten (10) days after the serving of such violation or non-compliance of any provision of the Contract shall cease and satisfactory arrangement for the correction thereof be made, this Contract, shall, upon the expiration of said ten (10) day period, cease and terminate in every respect. In the event of any such termination, the City shall immediately serve written notice thereof upon the surety and the Contractor and the surety shall have the right to take over and perform the Contract, provided, however, that if the surety within fifteen (15) days after the serving upon it of such notice of termination does not perform the Contract or does not commence performance thereof within thirty (30) days from the date of serving such notice, the City itself may take over the work under the Contract and prosecute the same to completion by Contract or by any other method it may deem advisable, for the account and at the expense of the Contractor, and his surety shall be liable to the City for any excess cost or other damages occasioned the City thereby. In such event, the City,

1		<u> </u>	N	ITR	Λ	CI	· N		M	R	FE	•
١	L	u	IV		м	LI	- 13	ıu	ΠA	Ю	Cr	•

if it so elects, may, without liability for so doing, take possession of and utilize in completing said Contract such materials, machinery, appliances, equipment, plants and other properties belonging to the Contractor as may be on site of the project and useful therein.

- 4) The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the City.
- 5) Contractor agrees and covenants to hold and save the City, its officers, agents, representatives and employees harmless and to promptly indemnify same from and against any and all claims, actions, damages, liability of every type and nature including all costs and legal expenses incurred by reason of any work arising under or in connection with the Contract to be performed hereunder, including loss of life, personal injury and/or damage to property arising from or out of any occurrence, omission or activity upon, on or about the premises worked upon or in any way relating to this Contract. This hold harmless and indemnification provision shall likewise apply for or on account of any patented or unpatented invention, process, article or appliance manufactured for use in the performance of the Contract, including its use by the City, unless otherwise specifically provided for in this Contract. In the event the City shall, without fault on its part, be made a party to any litigation commenced by or against Contractor, then Contractor shall proceed and hold the City harmless and he shall pay all costs, expenses and reasonable attorney's fees incurred or paid by the City in connection with such litigation. Furthermore, Contractor agrees to pay all costs, expenses and reasonable attorney's fees that may be incurred or paid by City in the enforcement of any of the covenants, provisions and agreements hereunder.
- Any notice from one party to the other party under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by its duly authorized representative of such party. Any such notice as heretofore specified shall be given by personal delivery thereof or by depositing same in the United States mail, postage prepaid, certified or registered mail.
- 7) The Contractor shall commence performance of the Contract no later than 10 calendar days after Contract final execution, and shall complete the full performance of the Contract not later than 90 working days from the date of commencement. For each and every working day of delay after the established day of completion, it is hereby stipulated and agreed that the damages to the City occasioned by said delay shall be a sum calculated and imposed in compliance with 2016 WSDOT Standard Specifications, Section 1-08.9, Liquidated Damages (and not as a penalty) for each such day, which shall be paid by the Contractor to the City.
- Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of any installation provided for by this Contract shall relieve the Contractor of liability in respect to any warranties or responsibility for faulty materials or workmanship. The Contractor shall be under the duty to remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within the period of one (1) year from the date of final acceptance only that work listed in Group(s) none of the Summary of quantities in the Contract Plans, i.e. the "Federal Non-Participating Items," unless a longer period is specified. However, all manufacturer's warranties or guarantees on electrical and mechanical equipment, consistent with those provided as customary trade practice, shall be assigned to the City at the time of project acceptance. The Contractor shall further be required to supply warranties or quarantees providing for satisfactory in-service operation of any mechanical and electrical equipment and related components involved in Group(s) none of the Summary of Quantities in the Contract Plans, i.e. "Federal Participating Items" for a period not to exceed 6 months following project acceptance. The City will give notice of observed defects as heretofore specified with reasonable promptness after discovery thereof, and Contractor shall be obligated to take immediate steps to correct and remedy any such defect, fault or breach at the sole cost and expense of Contractor

	CONTRACT NUMBER
1	

- 9) The Contractor and each subcontractor, if any, shall submit to the City such schedules of quantities and costs, progress schedules, payrolls, reports, estimates, records and miscellaneous data pertaining to the Contract as may be requested by the City from time to time.
- 10) The Contractor shall furnish a surety bond or bonds as security for the faithful performance of the Contract, including the payment of all persons and firms performing labor on the construction project under this Contract or furnishing materials in connection with this Contract; said bond to be in the full amount of the Contract price as specified in Paragraph 11. The surety or sureties on such bond or bonds must be duly licensed as a surety in the State of Washington.

11)	) The total amount of this contract is the sum of	
	Numbers	
	written words	

which includes any required Washington State Sales Tax. Payments will be made to Contractor as specified in the "Standard Specifications" of this Contract.

IN WITNESS WHEREOF, the City has caused these presents to be signed by its City Manager and attes by its City Attorney and the Contractor has hereunto set his hand and seal the day and year first abo							
written.  CONTRACTOR				CITY OF SAMMAMIS	SH		
President/Partner/Owner			City Mar	nager ATTEST			
Secretary		City Atto	orney				
check one □ Individual		Firm Name Partnership		Corporation Incor	rporated in		

#### Attention:

If business is a CORPORATION, name of the corporation should be listed in full and both President and Secretary must sign the contract, OR if one signature is permitted by corporation by-laws, a copy of the by-laws shall be furnished to the City and made a part of the contract document.

If business is a PARTNERSHIP, full name of each partner should be listed followed by d/b/a (doing business as) and firm or trade name; any one partner may sign the contract.

If business is an INDIVIDUAL PROPRIETORSHIP, the name of the owner should appear followed by d/b/a and name of the company.

CONTRACT	NUMBER

(Rev. November 2017) Department of the Treasury Internal Revenue Service

#### Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

00	Business name/disregarded entity name, if different from above	only one of the 4 Exemptions loodes apply only to						
on page 3.	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check of following seven boxes.	certain entities, not individuals; see instructions on page 3):						
S on	☐ Individual/sole proprietor or ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ single-member LLC	Trust/estate  Exempt payee code (if any)						
Zio.	Limited (lability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership)							
fic Instructions	Note: Check the appropriate box in the line above for the tax classification of the single-member owner. LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-m is disregarded from the owner should check the appropriate box for the tax classification of its owner.	r of the LLC is goods of any						
	Other (see instructions)	Applies to accounts maintained outside the U.S.						
Spec	5 Address (number, street, and apt. or suite no.) See Instructions. Rec	Requester's name and address (optional)						
oee .	6 City, state, and ZIP code 801	y of Sammamish I 228th Ave SE mmamish, WA 98075						
į.	7 List account number(s) here (optional)							
212	10(11)	CO						
	Taxpayer Identification Number (TIN)	Social security number						
er ku ide	10(11)	Social security number						

#### Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Signature of Here

#### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

#### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

. Form 1099-INT (interest earned or paid)

- . Form 1099-DIV (dividends, including those from stocks or mutual
- . Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- . Form 1099-S (proceeds from real estate transactions)

Date >

- . Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- · Form 1099-C (canceled debt)
- . Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,

Form W-9 (Rev. 11-2017)

CONTRACT	NUMBER



801 228<sup>th</sup> Avenue SE • Sammamish, WA 98075 Phone: 425-295-0500 • Fax: 425-295-0600 www.sammamish.us

### EXHIBIT B PAYMENT AND PERFORMANCE BOND

Principal, and as Surety, are in the sum of dollars (\$ ourselves, our heirs, executors, admi presents, the condition of this bond s	jointly and s ), for nistrators, a such that;	at of as severally held and bound unto the City of Sammamish repayment of which we jointly and severally bind and assigns, and successors and assigns, firmly by these
	nmamish by	, the Principal herein made and entered into a the terms, conditions and provisions of which contract nd do certain work to with:
	reference is	aid contract, which contract as so executed is hereunto s incorporated, herein and made a part hereof, as fully
terms, conditions and provisions of s perform all matters and things by sa the terms proposed therein, and with required by law, pursuant to 39.08 subcontractors and material men,	aid contract aid Principal ain the time B Revised Co and all pe pplies for the	is shall faithfully and truly observe and comply with the in all respects, and shall well and truly and fully do and undertaken to be performed under said contract, upon prescribed therein and, further, if the Principal shall, as ode of Washington, pay all laborers, mechanics, and ersons who shall supply such person or persons or e carrying on of such work, then and in that event this e and remain in full force and effect.
WITNESS our hand the	day of	20
PRINCIPAL		SURETY
Ву		By:
Title:		Title:
Address:		Address:
City/State/Zip:	_	City/State/Zip:
Telephone:		Telephone:

**IMPORTANT:** Surety companies executing bonds must appear on the U.S. Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Washington, for the full amount of the Contract

<b>CONTRACT NUMBER</b>
------------------------



Finance Department

801 228<sup>th</sup> Avenue SE • Sammamish, WA 98075 Phone: 425-295-0500 • Fax: 425-295-0600 www.sammamish.us

#### CONTRACTOR'S RETAINAGE AGREEMENT

### **IDENTIFICATION AND DESCRIPTION** Project Title: 2019 FLASHING YELLOW ARROW SIGNALS PROJECT Contractor: \_\_\_\_\_\_ Representative: \_\_\_\_\_ Bid No.: \_\_\_\_\_ Date: \_\_\_\_ City Clerk: \_\_\_\_ City Council Award Date: **CONTRACTOR'S INSTRUCTIONS** Pursuant to R.C.W. 60.28.01 0 I hereby notify the City of Sammamish of my instructions to: ☐ invest not to invest the retainage withheld under the terms of this contract. Type of Investment: **RETAINAGE FORMULA** In accordance with applicable State Statutes, the following provisions will be made for the disposition of the retainage held for investment: 1. All investments selected are subject to City approval. 2. Retainage under this agreement will be held in escrow by the the terms of which are specified by separate escrow agreement. The cost of the investment program is to be borne entirely by the contractor. 3. The final disposition of the contract retainage will be made in accordance with applicable statutes. Date\_\_\_\_ Contractor: Firm Name \_\_\_\_\_Title\_\_\_\_\_ Signature CITY APPROVAL Address: Approval of Investment Program and Retainage Agreement Federal ID #:

Date

Estimated Completion Date:

#### PART 4

## AMENDMENTS TO THE STANDARD SPECIFICATIONS



#### INTRO.AP1

#### INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2018 Standard Specifications for Road, Bridge, and Municipal Construction.

4 5

1

2

3

#### AMENDMENTS TO THE STANDARD SPECIFICATIONS

6 7 8

9

10

The following Amendments to the Standard Specifications are made a part of this contract and supersede any conflicting provisions of the Standard Specifications. For informational purposes, the date following each Amendment title indicates the implementation date of the Amendment or the latest date of revision.

11 12 13

Each Amendment contains all current revisions to the applicable section of the Standard Specifications and may include references which do not apply to this particular project.

14 15

- 1-01.AP1
- 17 Section 1-01, Definitions and Terms
- 18 August 6, 2018

16

#### 1-01.3 Definitions

The following new term and definition is inserted before the definition for "Shoulder":

21 22 23

19

20

Sensitive Area - Natural features, which may be previously altered by human activity, that are present on or adjacent to the project location and protected, managed, or regulated by local, tribal, state, or federal agencies.

24 25

The following new term and definition is inserted after the definition for "Working Drawings":

26 27 28

WSDOT Form - Forms developed and maintained by WSDOT that are required or available for use on a project. These forms can be downloaded from the forms catalogue at:

29 30 31

http://wsdot.wa.gov/forms/pdfForms.html

32 33

36

37

1-02.AP1

34 35

# Section 1-02, Bid Procedures and Conditions

October 30, 2018

# 1-02.4(1) General

This section is supplemented with the following:

42

43

44

45

46

Prospective Bidders are advised that the Contracting Agency may include a partially completed Washington State Department of Ecology (Ecology) Transfer of Coverage (Ecology Form ECY 020-87a) for the Construction Stormwater General Permit (CSWGP) as part of the Bid Documents. When the Contracting Agency requires the transfer of coverage of the CSWGP to the Contractor, an informational copy of the Transfer of Coverage and the associated CSWGP will be included in the appendices. As a condition of Section 1-03.3, the Contractor is required to complete sections I, III, and VIII of the Transfer of Coverage and return the form to the Contracting Agency.

The Contracting Agency is responsible for compliance with the CSWGP until the end of day that the Contract is executed. Beginning on the day after the Contract is executed, the Contractor shall assume complete legal responsibility for compliance with the CSWGP and full implementation of all conditions of the CSWGP as they apply to the Contract Work.

# 1-02.5 Proposal Forms

At the request of a Bidder, the Contracting Agency will provide a physical Proposal Form for any project on which the Bidder is eligible to Bid.

# 1-02.6 Preparation of Proposal

Item number 1 of the second paragraph is revised to read:

The first sentence of the first paragraph is revised to read:

 A unit price for each item (omitting digits more than two places to the right of the decimal point),

In the third sentence of the fourth paragraph, "WSDOT Form 422-031" is revised to read "WSDOT Form 422-031U".

The following new paragraph is inserted before the last paragraph:

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form (WSDOT Form 272-009). Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

1-03.AP1

# Section 1-03, Award and Execution of Contract

**January 2, 2018** 

# 1-03.3 Execution of Contract

The first paragraph is revised to read:

Within 20 calendar days after the Award date, the successful Bidder shall return the signed Contracting Agency-prepared Contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided, and shall be registered as a contractor in the state of

#### 1-03.5 Failure to Execute Contract

The first sentence is revised to read:

Washington.

Failure to return the insurance certification and bond with the signed Contract as required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's Business Enterprise information if required in the Contract, or failure or refusal to sign the Contract, or failure to register as a contractor in the state of Washington, or failure to return the completed Transfer of Coverage for the Construction Stormwater General Permit to the

1 Contracting Agency when provided shall result in forfeiture of the proposal bond or 2 deposit of this Bidder. 3 4 1-05.AP1 5 Section 1-05, Control of Work August 6, 2018 6 7 1-05.5 Vacant 8 This section, including title, is revised to read: 9 1-05.5 Tolerances 10 11 Geometrical tolerances shall be measured from the points, lines, and surfaces defined in 12 Contract documents. 13 14 A plus (+) tolerance increases the amount or dimension to which it applies, or raises a 15 deviation from level. A minus (-) tolerance decreases the amount or dimension to which 16 it applies, or lowers a deviation from level. Where only one signed tolerance is specified 17 (+ or -), there is no specified tolerance in the opposing direction. 18 19 Tolerances shall not be cumulative. The most restrictive tolerance shall control. 20 21 Tolerances shall not extend the Work beyond the Right of Way or other legal boundaries 22 identified in the Contract documents. If application of tolerances causes the extension of 23 the Work beyond the Right of Way or legal boundaries, the tolerance shall be reduced for 24 that specific instance. 25 26 Tolerances shall not violate other Contract requirements. If application of tolerances 27 causes the Work to violate other Contract requirements, the tolerance shall be reduced 28 for that specific instance. If application of tolerances causes conflicts with other 29 components or aspects of the Work, the tolerance shall be reduced for that specific 30 instance. 31 32 1-05.9 Equipment 33 The following new paragraph is inserted before the first paragraph: 34 35 Prior to mobilizing equipment on site, the Contractor shall thoroughly remove all loose 36 dirt and vegetative debris from drive mechanisms, wheels, tires, tracks, buckets and 37 undercarriage. The Engineer will reject equipment from the site until it returns clean. 39 This section is supplemented with the following: 40 41 Upon completion of the Work, the Contractor shall completely remove all loose dirt and 42

38

vegetative debris from equipment before removing it from the job site.

43

1-06.AP1

44

Section 1-06, Control of Material 46 **January 7, 2019** 

45

# 1-06.1(3) Aggregate Source Approval (ASA) Database

This section is supplemented with the following:

48 49

from Table 2.

- 7. If the CPF determined from step 6 is 1.00 or greater: use that CPF for the compaction lot; however, the maximum HMA compaction CPF using an LSL = 92.0 shall be 1.05.
- 8. If the CPF from step 6 is not 1.00 or greater: repeat steps 3 through 6 using an LSL = 91.5. The value thus determined shall be the HMA compaction CPF for that lot; however, the maximum HMA compaction CPF using an LSL = 91.5 shall be 1.00.

# 1-06.2(2)D1 Quality Level Analysis

The following new sentence is inserted after the first sentence:

The quality level calculations for HMA compaction are completed using the formulas in Section 1-06.2(2)D5.

# 1-06.2(2)D4 Quality Level Calculation

The first paragraph (excluding the numbered list) is revised to read:

The procedures for determining the quality level and pay factors for a material, other than HMA compaction, are as follows:

#### 1-06.6 Recycled Materials

The first three sentences of the second paragraph are revised to read:

The Contractor shall submit a Recycled Material Utilization Plan on WSDOT Form 350-075A within 30 calendar days after the Contract is executed. The plan shall provide the Contractor's anticipated usage of recycled concrete aggregates for meeting the requirements of these Specifications. The quantity of recycled concrete aggregate will be provided in tons and as a percentage of the Plan quantity for eligible material listed in Section 9-03.21(1)E Table on Maximum Allowable percent (By Weight) of Recycled Material.

The last paragraph is revised to read:

Within 30 calendar days after Physical Completion, the Contractor shall report the quantity of recycled concrete aggregates that were utilized in the construction of the project for each eligible item listed in Section 9-03.21(1)E. The Contractor's report shall be provided on WSDOT Form 350-075A, Recycled Materials Reporting.

#### 1-06.6(1)A General

Item 1(a) in the second paragraph is revised to read:

a. The estimated costs for the Work for each material with 25 percent recycled concrete aggregate. The cost estimate shall include for each material a documented price quote from the supplier with the lowest total cost for the Work.

1 1	I-C	)7.	А	Ρ1

#### 2 Section 1-07, Legal Relations and Responsibilities to the Public

#### 3 April 1, 2019

#### 1-07.5 Environmental Regulations

This section is supplemented with the following new subsections:

# 1-07.5(5) U.S. Army Corps of Engineers

When temporary fills are permitted, the Contractor shall remove fills in their entirety and the affected areas returned to pre-construction elevations.

If a U.S. Army Corps of Engineers permit is noted in Section 1-07.6 of the Special Provisions, the Contractor shall retain a copy of the permit or the verification letter (in the case of a Nationwide Permit) on the worksite for the life of the Contract. The Contractor shall provide copies of the permit or verification letter to all subcontractors involved with the authorized work prior to their commencement of any work in waters of the U.S.

# 1-07.5(6) U.S. Fish/Wildlife Services and National Marine Fisheries Service

The Contracting Agency will provide fish exclusion and handling services if the Work dictates. However, if the Contractor discovers any fish stranded by the project and a Contracting Agency biologist is not available, they shall immediately release the fish into a flowing stream or open water.

#### 1-07.5(1) General

The first sentence is deleted and replaced with the following:

No Work shall occur within areas under the jurisdiction of resource agencies unless authorized in the Contract.

The third paragraph is deleted.

#### 1-07.5(2) State Department of Fish and Wildlife

This section is revised to read:

2.

In doing the Work, the Contractor shall:

 1. Not degrade water in a way that would harm fish, wildlife, or their habitat.

 except as may be specified in the Contract.

Not place materials below or remove them from the ordinary high water line

 3. Not allow equipment to enter waters of the State except as specified in the Contract.

 4. Revegetate in accordance with the Plans, unless the Special Provisions permit otherwise.

 5. Prevent any fish-threatening silt buildup on the bed or bottom of any body of water.

6. Ensure continuous stream flow downstream of the Work area.

- 7. Dispose of any project debris by removal, burning, or placement above highwater flows.
- 8. Immediately notify the Engineer and stop all work causing impacts, if at any time, as a result of project activities, fish are observed in distress or a fish kill occurs.

If the Work in (1) through (3) above differs little from what the Contract requires, the Contracting Agency will measure and pay for it at unit Contract prices. But if Contract items do not cover those areas, the Contracting Agency will pay pursuant to Section 1-09.4. Work in (4) through (8) above shall be incidental to Contract pay items.

#### 1-07.5(3) State Department of Ecology

This section is revised to read:

In doing the Work, the Contractor shall:

- 1. Comply with Washington State Water Quality Standards.
- 2. Perform Work in such a manner that all materials and substances not specifically identified in the Contract documents to be placed in the water do not enter waters of the State, including wetlands. These include, but are not limited to, petroleum products, hydraulic fluid, fresh concrete, concrete wastewater, process wastewater, slurry materials and waste from shaft drilling, sediments, sediment-laden water, chemicals, paint, solvents, or other toxic or deleterious materials.
- 3. Use equipment that is free of external petroleum-based products.
- 4. Remove accumulations of soil and debris from drive mechanisms (wheels, tracks, tires) and undercarriage of equipment prior to using equipment below the ordinary high water line.
- 5. Clean loose dirt and debris from all materials placed below the ordinary high water line. No materials shall be placed below the ordinary high water line without the Engineer's concurrence.
- When a violation of the Construction Stormwater General Permit (CSWGP)
  occurs, immediately notify the Engineer and fill out WSDOT Form 422-011,
  Contractor ECAP Report, and submit the form to the Engineer within 48 hours
  of the violation.
- 7. Once Physical Completion has been given, prepare a Notice of Termination (Ecology Form ECY 020-87) and submit the Notice of Termination electronically to the Engineer in a PDF format a minimum of 7 calendar days prior to submitting the Notice of Termination to Ecology.
- 8. Transfer the CSWGP coverage to the Contracting Agency when Physical Completion has been given and the Engineer has determined that the project site is not stabilized from erosion.

1-07.5(4) Air Quality
This section is revised to read:
The Contractor shall comply with all regional clean air authority and/or State Department
of Ecology rules and regulations.
The air quality permit process may include additional State Environment Policy Act
(SEPA) requirements. Contractors shall contact the appropriate regional air pollution
control authority well in advance of beginning Work.
When the Work includes demolition or renovation of any existing facility or structure that
contains Asbestos Containing Material (ACM) and/or Presumed Asbestos-Containing
Material (PACM), the Contractor shall comply with the National Emission Standards for
Hazardous Air Pollutants (NESHAP).
Any requirements included in Federal and State regulations regarding air quality that
Any requirements included in Federal and State regulations regarding air quality that applies to the "owner or operator" shall be the responsibility of the Contractor.
applies to the owner of operator shall be the responsibility of the contractor.
1-07.7(1) General
The first sentence of the third paragraph is revised to read:
The first sentence of the third paragraph is revised to read.
When the Contractor moves equipment or materials on or over Structures, culverts or
pipes, the Contractor may operate equipment with only the load-limit restrictions in
Section 1-07.7(2).
3331311 1 31.1 (2).
The first sentence of the last paragraph is revised to read:
Unit prices shall cover all costs for operating over Structures, culverts and pipes.

9. Submit copies of all correspondence with Ecology electronically to the Engineer

in a PDF format within four calendar days.

#### 1-07.9(1) General

32 33

34 35 36

37

38

39

40 41

42

43 44

45 46

47 48

49 50

51

52

1

2

The last sentence of the sixth paragraph is revised to read:

Generally, the Contractor initiates the request by preparing standard form 1444 Request for Authorization of Additional Classification and Rate, available at https://www.dol.gov/whd/recovery/dbsurvey/conformance.htm, and submitting it to the Engineer for further action.

#### 1-07.9(2) Posting Notices

The second sentence of the first paragraph (up until the colon) is revised to read:

The Contractor shall ensure the most current edition of the following are posted:

The revision dates are deleted from all items in the numbered list.

The following new items are inserted after item number 1:

2. **Mandatory Supplement to EEOC P/E-1** published by US Department of Labor. Post for projects with federal-aid funding.

1 2 3	3.		Transparency Nondiscrimination Provision published by US Department of or. Post for projects with federal-aid funding.	
5 4 5	Item number 2 through 12 are renumbered to 4 through 14, respectively.			
6 7			Contractual Requirements n, "creed" is revised to read "religion".	
8 9	Item nu	mber	s 1 through 9 are revised to read 2 through 10, respectively.	
10 11 12	After the	e pre	ceding Amendment is applied, the following new item number 1 is inserted:	
13 14 15 16	1.	fear	e Contractor shall maintain a Work site that is free of harassment, humiliation, r, hostility and intimidation at all times. Behaviors that violate this requirement ude but are not limited to:	
17 18		a.	Persistent conduct that is offensive and unwelcome.	
19 20		b.	Conduct that is considered to be hazing.	
21 22		C.	Jokes about race, gender, or sexuality that are offensive.	
23 24 25		d.	Unwelcome, unwanted, rude or offensive conduct or advances of a sexual nature which interferes with a person's ability to perform their job or creates an intimidating, hostile, or offensive work environment.	
26 27 28 29		e.	Language or conduct that is offensive, threatening, intimidating or hostile based on race, gender, or sexual orientation.	
30 31 32		f.	Repeating rumors about individuals in the Work Site that are considered to be harassing or harmful to the individual's reputation.	
33 34 35			Sanctions is supplemented with the following:	
36 37 38 39	Immediately upon the Engineer's request, the Contractor shall remove from the Work site any employee engaging in behaviors that promote harassment, humiliation, fear or intimidation including but not limited to those described in these specifications.			
40 41			Incorporation of Provisions tence is revised to read:	
42 43 44 45 46	The Contractor shall include the provisions of Section 1-07.11(2) Contractual Requirements (1) through (5) and the Section 1-07.11(5) Sanctions in every subcontract including procurement of materials and leases of equipment.			
47 48			Spill Prevention, Control, and Countermeasures Plan tence of the first paragraph is revised to read:	

Plan

template

**SPCC** 

prevent-report.

An

49

50

51

52

at

available

is

information

http://www.wsdot.wa.gov/environment/technical/disciplines/hazardous-materials/spill-

and

guidance

# 1-07.16(2)A Wetland and Sensitive Area Protection

The first sentence of the first paragraph is revised to read:

3 4 5

Existing wetland and other sensitive areas, where shown in the Plans or designated by the Engineer, shall be saved and protected through the life of the Contract.

6 7 8

#### 1-07.18 Public Liability and Property Damage Insurance Item number 1 is supplemented with the following new sentence:

9 10

This policy shall be kept in force from the execution date of the Contract until the Physical Completion Date.

11 12 13

15

16

1-08.AP1

14

# Section 1-08, Prosecution and ProgressJanuary 7, 2019

# 1-08.1 Subcontracting

The first sentence of the seventh paragraph is revised to read:

17 18 19

20

21 22

23

24

All Work that is not performed by the Contractor will be considered as subcontracting except: (1) purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready-mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any other materials supplied by established and recognized commercial plants; or (2) delivery of these materials to the Work site in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies hired by those commercial plants.

25 26 27

The following new paragraph is inserted after the seventh paragraph:

28 29

30

The Contractor shall not use businesses (material suppliers, vendors, subcontractors, etc.) with federal purchasing exclusions. Businesses with exclusions are identified using the System for Award Management web page at www.SAM.gov.

31 32 33

# 1-08.5 Time for Completion

34 35 36

37

Item number 2 of the sixth paragraph is supplemented with the following:

38 39 40 A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).

41 42 43

# 1-08.7 Maintenance During Suspension

The fifth paragraph is revised to read:

44 45 46

The Contractor shall protect and maintain all other Work in areas not used by traffic. All costs associated with protecting and maintaining such Work shall be the responsibility of the Contractor

1 2 3	1-09.AP1 Section 1-09, Measurement and Payment August 6, 2018
4 5	1-09.2(1) General Requirements for Weighing Equipment The last paragraph is supplemented with the following:
6 7 8 9 10	When requested by the Engineer, the Contractor's representative shall collect the tickets throughout the day and provide them to the Engineer's designated receiver, not later than the end of shift, for reconciliation. Tickets for loads not verified as delivered will receive no pay.
12 13 14	1-09.2(2) Specific Requirements for Batching Scales The last sentence of the first paragraph is revised to read:
15 16 17	Batching scales used for concrete or hot mix asphalt shall not be used for batching other materials.
18 19 20	1-09.10 Payment for Surplus Processed Materials The following sentence is inserted after the first sentence of the second paragraph:
21 22 23	For Hot Mix Asphalt, the Plan quantity and quantity used will be adjusted for the quantity of Asphalt and quantity of RAP or other materials incorporated into the mix.
24 25 26	2-01.AP2 Section 2-01, Clearing, Grubbing, and Roadside Cleanup April 1, 2019
27 28	2-01.2(3) Disposal Method No. 3 – Chipping Item number 2 of the first paragraph is revised to read:
29 30 31 32	<ol><li>Chips shall be disposed outside of sensitive areas, and in areas that aren't in conflict with permanent Work.</li></ol>
33 34 35	2-02.AP2 Section 2-02, Removal of Structures and Obstructions April 2, 2018
36 37 38	2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters In item number 3 of the first paragraph, the second sentence is revised to read:
39 40 41 42	For concrete pavement removal, a second vertical full depth relief saw cut offset 12 to 18 inches from and parallel to the initial saw cut is also required, unless the Engineer allows otherwise.
42 13	2-03 ΔΡ2

Section 2-03, Roadway Excavation and Embankment 44

**April 1, 2019** 45

2-03.3(14)F Displacement of Unsuitable Foundation Materials 46

This section, including title, is revised to read: 47

# 2-03.3(14)F Vacant

2-09.AP2

Section 2-09, Structure Excavation

April 1, 2019

#### 2-09.2 Materials

In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland Cement Concrete" are revised to read:

Cement 9-01 Fine Aggregate for Concrete 9-03.1(2)

#### 2-09.3(3)B Excavation Using Open Pits – Extra Excavation

The last two paragraphs are deleted and replaced with the following:

The excavation height (Ht) shall be calculated within a vertical plane as the difference between the lowest elevation in the excavation and the highest elevation of the ground surface immediately adjacent to the excavation. Pavement thickness and other surface treatments existing at the time of the excavation shall be included in the height calculation.

22

#### **Submittals and Design Requirements**

Excavations 4-feet and less in height do not require design and submittals. The Contractor shall provide a safe work environment and shall execute the work in a manner that does not damage adjacent pavements, utilities, or structures. If the Engineer determines the Contractor's work may potentially affect adjacent traffic, pavements, utilities, or structures, the Engineer may request a Type 1 Working Drawing from the Contractor. The Contractor shall explain in the Type 1 Working Drawing how the Engineer's concerns will be addressed, why infrastructure will not be damaged by the work, and how worker safety will be preserved.

For excavations that have soil types and slope geometries defined in WAC 296-155 part N and are between 4-feet and 20-feet in height, the Contractor shall submit Type 2 Working Drawings. Required submittal elements include, at a minimum, the following:

36 37 38

A plan view showing the limits of the excavation and its relationship to traffic, structures, utilities and other pertinent project elements. If the stability of the excavation requires no-load zones or equipment setback distances, those shall be shown on the plan view.

40 41 42

43

44

45

39

A typical or controlling cross section showing the proposed excavation, original ground line, and locations of traffic, existing structures, utilities, site constraints. surcharge loads, or other conditions that could affect the stability of the slope. If the stability of the excavation requires no-load zones or equipment setback distances, those shall be shown in cross section.

46 47 48

A summary clearly describing subsurface conditions, soil type for WAC 296-155 part N, and groundwater conditions, sequencing considerations, and governing assumptions.

Where WAC 296-155 part N requires an engineer's design, the Contractor shall submit Type 2E Working Drawings. Required submittal elements include, at a minimum, the three items above and the following additional items:

4. Supporting calculations for the design of the excavation, the soil and material properties selected for design, and the justification for the selection for those properties, in accordance with the WSDOT *Geotechnical Design Manual* M 46-

03.

- 5. Safety factors, or load and resistance factors used, and justification for their selection, in accordance with the WSDOT *Geotechnical Design Manual* M 46-03, and referenced AASHTO design manuals.
- 6. A monitoring plan to evaluate the excavation performance throughout its design life.
- 7. Any supplemental subsurface explorations made by the Contractor to meet the requirements for geotechnical design of excavation slopes, in accordance with the WSDOT *Geotechnical Design Manual* M 46-03.

2-09.3(3)D Shoring and Cofferdams

The first sentence of the sixth paragraph is revised to read:

Structural shoring and cofferdams shall be designed for conditions stated in this Section using methods shown in Division I Section 5 of the AASHTO *Standard Specifications for Highway Bridges* Seventeenth Edition – 2002 for allowable stress design, or the AASHTO *LRFD Bridge Design Specifications* for load and resistance factor design.

3-01 AP3

- Section 3-01, Production from Quarry and Pit Sites
- **April 2, 2018** 
  - 3-01.1 Description
    - The first paragraph is revised to read:

This Work shall consist of manufacturing and producing crushed and screened aggregates including pit run aggregates of the kind, quality, and grading specified for use in the construction of concrete, hot mix asphalt, crushed surfacing, maintenance rock, ballast, gravel base, gravel backfill, gravel borrow, riprap, and bituminous surface treatments of all descriptions.

4-04.AP4

- Section 4-04, Ballast and Crushed Surfacing
- **April 2, 2018** 
  - 4-04.3(5) Shaping and Compaction
  - This section is supplemented with the following new paragraph:

When using 100% Recycled Concrete Aggregate, the Contractor may submit a written request to use a test point evaluation for compaction acceptance testing in lieu of compacting to 95% of the standard density as determined by the requirements of Section 2-03.3(14)D. The test point evaluation shall be performed in accordance with SOP 738.

5-01 AP5

# Section 5-01, Cement Concrete Pavement Rehabilitation

#### 4 January 7, 2019

#### 5-01.2 Materials

The reference for Concrete Patching Material is revised to read:

Concrete Patching Material, Grout, and Mortar

# 5-01.3(1)A1 Concrete Patching Materials

In this section, each reference to "9-20" is revised to read "9-20.1".

# 5-01.3(4) Replace Cement Concrete Panel

This section's content is deleted and replaced with the following new subsections:

# 5-01.3(4)A General

Curing, cold weather work, concrete pavement construction in adjacent lines, and protection of pavement shall meet the requirements of Section 5-05.3(13) through Section 5-05.3(15). The Contractor, at no cost to the Contracting Agency, shall repair any damage to existing pavement caused by the Contractor's operations.

9-20.1

# 5-01.3(4)B Sawing and Dimensional Requirements

Concrete slabs to be replaced as shown in the Plans or staked by the Engineer shall be at least 6.0 feet long and full width of an existing pavement panel. The portion of the panel to remain in place shall have a minimum dimension of 6 feet in length and full panel width; otherwise the entire panel shall be removed and replaced. There shall be no new joints closer than 3.0 feet to an existing transverse joint or crack. A vertical full depth saw cut is required along all longitudinal joints and at transverse locations and, unless the Engineer allows otherwise, an additional vertical full depth relief saw cut located 12 to 18 inches from and parallel to the initial longitudinal and transverse saw cut locations is also required. Removal of existing cement concrete pavement shall not cause damage to adjacent slabs that are to remain in place. In areas that will be ground, slab replacements shall be performed prior to pavement grinding.

Side forms shall meet the requirements of Section 5-05.3(7)B whenever a sawed full depth vertical face cannot be maintained.

# 5-01.3(4)C Dowel Bars and Tie Bars

For the half of a dowel bar or tie bar placed in fresh concrete, comply with the requirements of Section 5-05.

For the half of a dowel bar or tie bar placed in hardened concrete, comply with the Standard Plans and the following.

After drilling, secure dowel bars and tie bars into the existing pavement with either an epoxy bonding agent Type I or IV as specified in Section 9-26.1, or a grout Type 2 for non-shrink applications as specified in Section 9-20.3.

Dowel bars shall be placed at the mid depth of the concrete slab, centered over the transverse joint, and parallel to the centerline and to the roadway surface, within the tolerances in the table below. Dowel bars may be adjusted to avoid contact with existing

12

13 14

15

16

17 18

19

20

21

22

23

24 25

26

27

28

29 30

31

32

33

34 35

36 37

38 39

40 41

dowel bars in the transverse joint at bridge approach slabs or existing panels provided the adjusted dowel bars meet the tolerances below.

Tie bars shall be placed at the mid depth of the concrete slab, centered over the joint, perpendicular to centerline, and parallel to the roadway surface, within the tolerances in the table below. The horizontal position of tie bars may be adjusted to avoid contact with existing tie bars in the longitudinal joint where panel replacement takes place, provided the adjusted tie bars meet the tolerances below.

Placement Tolerances		
	Dowel Bars	Tie Bars
Vertical: Center of Bar to Center of Slab Depth	$\pm$ 1.00 inch max	$\pm$ 1.00 inch max
Dowel Bar Centered Over the Transverse Joint	± 1.00 inch max	N/A
Tie Bar Centered Over the Longitudinal Joint	N/A	$\pm$ 1.00 inch max
Parallel to Centerline Over the Length of the Dowel Bar	$\pm0.50$ inch max	N/A
Perpendicular to Longitudinal Joint Over the Length of the Tie Bar	N/A	$\pm$ 1.00 inch max
Parallel to Roadway Surface Over the Length of the Bar	$\pm0.50$ inch max	$\pm$ 1.00 inch max

Dowel bars and tie bars shall be placed according to the Standard Plan when multiple panels are placed. Panels shall be cast separately from the bridge approach slab.

Dowel bars to be drilled into existing concrete or at a new transverse contraction joint shall have a parting compound, such as curing compound, grease, or other Engineer accepted equal, applied to them prior to placement.

Clean the drilled holes in accordance with the epoxy or grout manufacturer's instructions. Holes shall be clean and dry at the time of placing the epoxy, or grout and tie bars. Completely fill the void between the tie bar and the outer limits of the drilled hole with epoxy or grout. Use retention rings to prevent leakage of the epoxy or grout and support the tie bar to prevent movement until the epoxy or grout has cured the minimum time recommended by the manufacturer.

#### 5-01.3(4)D Foundation Preparation

The Contractor shall smooth the surfacing below the removed panel and compact it to the satisfaction of the Engineer. Crushed surfacing base course, or hot mix asphalt may be needed to bring the surfacing to grade prior to placing the new concrete.

If the material under the removed panel is uncompactable and the Engineer requires it, the Contractor shall excavate the Subgrade 2 feet, place a soil stabilization construction geotextile meeting the requirements of Section 9-33, and backfill with crushed surfacing base course. This Work may include:

- Furnishing and hauling crushed surfacing base course to the project site.
- 2. Excavating uncompactable material.
- 3. Furnishing and placing a soil stabilization construction geotextile.
- Backfilling and compacting crushed surfacing base course.

 5. Removing, hauling and restocking any unused crushed surfacing base course.

# 5-01.3(4)E Concrete Finishing

Grade control shall be the responsibility of the Contractor.

All panels shall be struck off level with the adjacent panels and floated to a smooth surface.

Final finish texturing shall meet the requirements of Section 5-05.3(11).

In areas where the Plans do not require grinding, the surface smoothness will be measured with a 10-foot straightedge by the Engineer in accordance with Section 5-05.3(12). If the replacement panel is located in an area that will be ground as part of concrete pavement grinding in accordance with Section 5-01.3(9), the surface smoothness shall be measured, by the Contractor, in conjunction with the smoothness measurement done in accordance with Section 5-01.3(10).

#### 5-01.3(4)F Joints

All transverse and longitudinal joints shall be sawed and sealed in accordance with Section 5-05.3(8). The Contractor may use a hand pushed single blade saw for sawing joints.

# 5-01.3(4)G Cracked Panels

Replacement panels that crack shall be repaired as specified in Section 5-05.3(22) at no cost to the Contracting Agency. When repairing replacement panels that have cracked, epoxy-coated dowel bars meeting the requirements of Section 9-07.5(1) may be substituted for the corrosion resistant dowel bars specified.

#### 5-01.3(4)H Opening to Traffic

Opening to traffic shall meet the requirements of Section 5-05.3(17).

#### 5-01.3(5) Partial Depth Spall Repair

The second sentence of the third paragraph is revised to read:

All sandblasting residue shall be removed.

#### 5-01.3(7) Sealing Existing Concrete Random Cracks

The second sentence of the second paragraph is revised to read:

Immediately prior to sealing, the cracks shall be clean.

# 5-01.3(8) Sealing Existing Longitudinal and Transverse Joint

The first sentence of the fifth paragraph is revised to read:

Immediately prior to sealing, the cracks shall be clean.

# 5-01.3(10) Pavement Smoothness

This section is revised to read:

Pavement surface smoothness for cement concrete pavement grinding on this project will include International Roughness Index (IRI) testing. Ride quality will be evaluated

 using the Mean Roughness Index (MRI) calculated by averaging the IRI data for the left and right wheel path within the section.

#### **Smoothness Testing Equipment and Operator Certification**

Use an inertial profiler and operator that meet the requirements of Section 5-05.3(3)E.

#### **Surface Smoothness**

Operate the inertial profiler in accordance with AASHTO R 57. Collect two longitudinal traces, one in each wheel path. Collect the control profile at locations designated in Table 2 prior to any pavement rehabilitation Work on the areas to be tested. Collect an acceptance profile at locations designated in Table 2 after completion of all cement concrete pavement grinding on the project. Profiles shall be collected in a continuous pass including areas excluded from pay adjustments. Provide notice to the Engineer a minimum of seven calendar days prior to testing.

Tab Locations Requi	
Travel lanes where cement concrete grinding is shown in the plans	Control profile
Additional locations designated by the Engineer	Control profile
Travel lanes with completed cement concrete pavement grinding	Acceptance profile
Bridges, approach panels and 0.02 miles before and after bridges and approach panels and other excluded areas within lanes requiring testing	Control and acceptance profile
Ramps, Shoulders and Tapers	Do not test

Within 30 calendar days after the Contractor's testing, the Engineer may perform verification testing. If the verification testing shows a difference in MRI greater than the 10 percent, the following resolution process will be followed:

- 1. The profiles, equipment and procedures will be evaluated to determine the cause of the difference.
- 2. If the cause of the discrepancy cannot be resolved the pavement shall be retested with both profilers at a mutually agreed time. The two profilers will test the section within 30 minutes of each other. If the retest shows a difference in MRI equal or greater than the percentages shown in Table 2 of AASHTO R 54 the Engineer's test results will be used for pavement smoothness acceptance.

The Contractor shall evaluate profiles for acceptance or corrective action using the current version of ProVAL and provide the results including the profile data in unfiltered electronic Engineering Research Division (ERD) file format to the Engineer within 3 calendar days of completing each days profile testing. If the profile data files are created using an export option in the manufacturer's software where filter settings can be specified, use the filter settings that were used to create data files for certification.

Analyze the entire profile. Exclude areas listed in Table 3.

	le 3 Acceptance Requirements
Location	Exclude
Beginning and end of grinding	Pavement within 0.02 mile
Bridges and approach slabs	The bridge and approach slab and 0.02 mile from the ends of the bridge or approach slab
Defects in the existing roadway identified by the Contractor that adversely affect the MRI such as dips, depressions and wheel path longitudinal joints. <sup>1</sup> 1The presence of defects is subject to	0.01-mile section containing the defect and the 0.01-mile section following the section with the defect.

Report the MRI results in inches per mile for each 0.01-mile section and each 0.10-mile section. Do not truncate 0.10-mile sections for areas excluded from MRI acceptance requirements. MRI requirements will not apply to 0.10-mile sections with more than three 0.01 mile-sections excluded. MRI requirements for the individual 0.01-mile sections shall still apply. The Engineer will verify the analysis.

The MRI for each 0.10 mile of ground lane will comply with the following:

Control Profile MRI per 0.10 Mile	Maximum MRI of Acceptance Profile per 0.10 Mile
≤130 inches/mile	78 inches/mile
>130 inches/mile	0.6 x Control Profile MRI

The MRI for each 0.01 mile of the completed cement concrete grinding shall not exceed 160 inches/mile.

All Work is subject to parallel and transverse 10-foot straightedge requirements, corrective work and disincentive adjustments.

Surface smoothness of travel lanes including areas subject to MRI testing shall not vary more than ½ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.

The smoothness perpendicular to the centerline will be measured with a 10-foot straightedge within the lanes. There shall be not vertical elevation difference of more than a ¼ inch between lanes.

Pavement that does not meet these requirements will be subject to corrective Work. All corrective Work shall be completed at no additional expense, including traffic control, to the Contracting Agency. Pavement shall be repaired by one or more of the following methods:

- 1. Diamond grinding.
- By other method accepted by the Engineer.

Repair areas shall be re-profiled to ensure they no longer require corrective Work. With concurrence of the Engineer, a 10-foot straight edge may be used in place of the inertial profiler.

7

8

If correction of the roadway as listed above either will not or does not produce satisfactory results as to smoothness or serviceability the Engineer may accept the completed pavement and a credit will be calculated in accordance with Section 5-01.5. Under these circumstances, the decision whether to accept the completed pavement or to require corrective work as described above shall be vested entirely in the Engineer.

9 10 11

# 5-01.5 Payment

12 13 This section is supplemented with the following:

14

"Grinding Smoothness Compliance Adjustment", by calculation.

15 16

Grinding Smoothness Compliance Adjustments will be based on the requirements in Section 5-01.3(10) and the following calculations:

17 18

19

20

A smoothness compliance adjustment will be calculated in the sum of minus \$100 for each and every section of single traffic lane 0.01 mile in length and \$1,000 for each and every section of single traffic lane 0.10 mile in length that does not meet the requirements in Section 5-01.3(10) after corrective Work.

21 22 23

5-02.AP5

Section 5-02, Bituminous Surface Treatment

April 1, 2019

24 25

# 5-02.3(5) Application of Aggregates

The first sentence of the eleventh paragraph is revised to read:

27 28 29

30

26

The Contractor shall use a pickup broom in all curbed areas, on all bridges, within city limits, within sensitive areas, and where shown in the Plans both before the application of emulsified asphalt and during the final brooming operation.

31 32

34 35

33 5-04.AP5

Section 5-04, Hot Mix Asphalt

**April 1, 2019** 

# 5-04.1 Description

The last sentence of the first paragraph is revised to read:

37 38 39

40

36

The manufacture of HMA may include additives or processes that reduce the optimum mixing temperature (Warm Mix Asphalt) or serve as a compaction aid in accordance with these Specifications.

41 42 43

#### 5-04.2 Materials

The reference to "Warm Mix Asphalt Additive" is revised to read "HMA Additive".

44 45 46

# 5-04.2(1) How to Get an HMA Mix Design on the QPL

47 48 The last bullet in the first paragraph is revised to read:

49 50

Do not include HMA additives that reduce the optimum mixing temperature or serve as a compaction aid when developing a mix design or submitting a mix design for

• Platforms or devices to enable sampling from the truck transport without entering the truck transport for sampling HMA.

5-04.3(4) Preparation of Existing Paved Surfaces

The first sentence of the fourth paragraph is revised to read:

Unless otherwise allowed by the Engineer, use cationic emulsified asphalt CSS-1, CSS-1h, or Performance Graded (PG) asphalt for tack coat.

5-04.3(6) Mixing

33 34

35

36 37

38

39 40

41

42

43 44

45 46

47

48

49 50

51

The first paragraph is revised to read:

The asphalt supplier shall introduce recycling agent and anti-stripping additive, in the amount designated on the QPL for the mix design, into the asphalt binder prior to shipment to the asphalt mixing plant.

The seventh paragraph is revised to read:

8

9

10

5-04.3(7) Spreading and Finishing

the additive.

The last row of the table is revised to read:

¾ inch 0.25 feet 0.30 feet

11 12

15

16

17

18

19

20

#### 5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA The following new paragraph is inserted after the first paragraph:

13 14

> The Contracting Agency's combined aggregate bulk specific gravity (Gsb) blend as shown on the HMA Mix Design will be used for VMA calculations until the Contractor submits a written request for a Gsb test. The new Gsb will be used in the VMA calculations for HMA from the date the Engineer receives the written request for a Gsb retest. The Contractor may request aggregate specific gravity (Gsb) testing be performed by the Contracting Agency twice per project. The Gsb blend of the combined stockpiles will be used to calculate voids in mineral aggregate (VMA) of any HMA produced after the new Gsb is determined.

> Upon discharge from the mixer, ensure that the temperature of the HMA does not exceed

the optimum mixing temperature shown on the accepted Mix Design Report by more than

25°F, or as allowed by the Engineer. When an additive is included in the manufacture of

HMA, do not heat the additive (at any stage of production including in binder storage

tanks) to a temperature higher than the maximum recommended by the manufacturer of

21 22 23

24

25

26

# 5-04.3(9)A1 Test Section – When Required, When to Stop

The following new row is inserted after the second row in Table 9:

VMA	Minimum PF <sub>i</sub> of 0.95 based on the criteria in	None <sup>4</sup>
	Section 5-04.3(9)B4 <sup>2</sup>	

27 28 29

# 5-04.3(9)A2 Test Section – Evaluating the HMA Mixture in a Test Section

In Table 9a, the test property "Gradation, Asphalt Binder, and V<sub>a</sub>" is revised to read "Gradation, Asphalt Binder, VMA, and V<sub>a</sub>"

30 31 32

In Table 9a, the first column of the third row is revised to read:

33

Aggregates: Sand Equivalent **Uncompacted Void Content** Fracture

34 35

# 5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing

In Table 11, "V<sub>a</sub>" is revised to read "VMA and V<sub>a</sub>"

36 37 38

# 5-04.3(9)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)

The following new row is inserted above the last row in Table 12:

40

39

Voids in Mineral Aggregate	2
(VMA)	

# 5-04.3(9)B7 Mixture Statistical Evaluation – Retests

The second to last sentence is revised to read:

The sample will be tested for a complete gradation analysis, asphalt binder content, VMA and V<sub>a</sub>, and the results of the retest will be used for the acceptance of the HMA mixture in place of the original mixture sublot sample test results.

# 5-04.3(10)A HMA Compaction – General Compaction Requirements

The last paragraph is revised to read:

On bridge decks and on roadway approaches within five feet of a bridge/back of pavement seat, rollers shall not be operated in a vibratory mode, defined as a mode in which the drum vibrates vertically. However, unless otherwise noted on the plans, rollers may be operated in an oscillatory mode, defined as a mode in which the drum vibrates in the horizontal direction only.

# 5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots

The bulleted item in the fourth paragraph is revised to read:

For a compaction lot in progress with a compaction CPF less than 0.75 using an LSL = 91.5, a new compaction lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

# **5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing** In the table, "WSDOT FOP for AASHTO T 355" is revised to read "FOP for AASHTO T 355".

# 5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments

In the first paragraph, "WSDOT FOP for AASHTO T 355" is revised to read "FOP for AASHTO T 355".

The first sentence in the second paragraph is revised to read:

For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in accordance with Section 1-06.2(2)D5 to determine the appropriate Composite Pay Factor (CPF).

The last two paragraphs are revised to read:

Determine the Compaction Price Adjustment (CPA) from the table below, selecting the equation for CPA that corresponds to the value of CPF determined above.

Calculating HMA Co	ompaction Price Adjustment (CPA)
Value of CPF	Equation for Calculating CPA
When CPF > 1.00	CPA = [1.00 x (CPF – 1.00)] x Q x UP
When CPF = 1.00	CPA = \$0
When CPF < 1.0	CPA = [0.60 x (CPF – 1.00)] x Q x UP

Where

1	CPA = Compaction Price Adjustment for the compaction lot (\$)
2	CPF = Composite Pay Factor for the compaction lot (maximum is 1.05)
3	Q = Quantity in the compaction lot (tons)
4	UP = Unit price of the HMA in the compaction lot (\$/ton)
5	
6	5-04.3(10)C4 HMA Statistical Compaction – Requests for Retesting
7	The first sentence is revised to read:
8	
9	For a compaction sublot that has been tested with a nuclear density gauge

For a compaction sublot that has been tested with a nuclear density gauge that did not meet the minimum of 91.5 percent of the theoretical maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core, taken at the same location as the nuclear density test, be used for determination of the relative density of the compaction sublot.

# 5-04.3(13) Surface Smoothness

The second to last paragraph is revised to read:

When concrete pavement is to be placed on HMA, the surface tolerance of the HMA shall be such that no surface elevation lies above the Plan grade minus the specified Plan depth of concrete pavement. Prior to placing the concrete pavement, bring any such irregularities to the required tolerance by grinding or other means allowed by the Engineer.

#### 5-04.5 Payment

The paragraph following the Bid item "Crack Sealing-LF", per linear foot is revised to read:

The unit Contract price per linear foot for "Crack Sealing-LF" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)A.

5-05.AP5

#### **Section 5-05, Cement Concrete Pavement**

**April 1, 2019** 

#### 5-05.1 Description

In the first paragraph, "portland cement concrete" is revised to read "cement concrete".

#### **5-05.2 Materials**

In the first paragraph, the reference to "Portland Cement" is revised to read:

Cement 9-01

In the first paragraph, the section reference for Concrete Patching Material is revised to read "9-20.1".

The second paragraph is revised to read:

Cementitious materials are considered to be the following: portland cement, blended hydraulic cement, fly ash, ground granulated blast furnace slag and microsilica fume.

#### 5-05.3(1) Concrete Mix Design for Paving

The table title in item number 4 is revised to read **Concrete Batch Weights**.

2	
3 4	5-05.3(3)E Smoothness Testing Equipment This section is revised to read:
5 6 7 8	Inertial profilers shall meet all requirements of AASHTO M 328 and be certified in accordance with AASHTO R 56 within the preceding 12 months.
9 10 11	The inertial profiler operator shall be certified as required by AASHTO R 56 within three years preceding profile measurement.
12 13 14 15 16 17 18 19 20 21	Equipment or operator certification by other states or a profiler certification facility will be accepted provided the certification meets the requirements of AASHTO R 56. Documentation verifying certification by another state shall be submitted to the Engineer a minimum of 14 calendar days prior to profile measurement. Equipment certification documentation shall include the information required by part 8.5 and 8.6 of AASHTO R 56. Operator documentation shall include a statement from the certifying state that indicates the operator is certified to operate the inertial profiler to be used on the project. The decision whether another state's certification meets the requirements of AASHTO R 56 shall be vested entirely in the Engineer.
22	5-05.3(4) Measuring and Batching Materials
23	Item number 2 is revised to read:
24	Nom number 2 to review to read.
25 26 27 28 29	<ol> <li>Batching Materials – On all projects requiring more than 2,500 cubic yards of concrete for paving, the batching plant shall be equipped to proportion aggregates and cement by weight by means of automatic and interlocked proportioning devices of accepted type.</li> </ol>
30	5-05.3(4)A Acceptance of Portland Cement Concrete Pavement
31 32	This section's title is revised to read:
33 34 35	Acceptance of Portland Cement or Blended Hydraulic Cement Concrete Pavement
36 37	The first sentence is revised to read:
38 39 40	Acceptance of portland cement or blended hydraulic cement concrete pavement shall be as provided under statistical or nonstatistical acceptance.
41	5-05.3(7) Placing, Spreading, and Compacting Concrete
42 43	This section's content is deleted.
44	5-05.3(10) Tie Bars and Corrosion Resistant Dowel Bars
45 46	The first sentence of the last paragraph is revised to read:
47 48	The tie bar holes shall be clean before grouting.
49	5-05.3(12) Surface Smoothness
50 51	This section is revised to read:

In item 4a, "Portland Cement" is revised to read "Cement".

10

11

12 13

14

15

16 17 18

24

19

25 26 27

28

29

30 31 32

33

34

35 36 37

38

39

40

41

42

43 44 45

46 47 48

Pavement surface smoothness for this project will include International Roughness Index (IRI) testing. The Contractor shall perform IRI testing on each through lane, climbing lane, and passing lane, greater than 0.25 mile in length and these lanes will be subject to incentive/disincentive adjustments. Ride quality will be evaluated using the Mean Roughness Index (MRI) calculated by averaging the IRI data for the left and right wheel path within the section.

Ramps, shoulders and tapers will not be included in MRI testing for pavement smoothness and will not be subject to incentive adjustments. All Work is subject to parallel and transverse 10-foot straightedge requirements, corrective work and disincentive adjustments.

Operate the inertial profiler in accordance with AASHTO R 57. Collect two longitudinal traces, one in each wheel path. Collect profile data after completion of all concrete paving on the project in a continuous pass including areas excluded from pay adjustments. Provide notice to the Engineer a minimum of seven calendar days prior to testing.

Within 30 calendar days after the Contractor's testing, the Engineer may perform verification testing. If the verification testing shows a difference in MRI greater than the percentages shown in Table 2 of AASHTO R 54 the following resolution process will be followed:

- 1. The profiles, equipment and procedures will be evaluated to determine the cause of the difference.
- If the cause of the discrepancy cannot be resolved the pavement shall be retested with both profilers at a mutually agreed time. The two profilers will test the section within 30 minutes of each other. If the retest shows a difference in MRI equal or greater than the percentages shown in Table 2 of AASHTO R 54 the Engineer's test results will be used to establish pay adjustments.

Surface smoothness of travel lanes not subject to MRI testing will be measured with a 10-foot straightedge no later than 5:00 p.m. of the day following the placing of the concrete. The completed surface of the wearing course shall not vary more than 1/2 inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.

Smoothness perpendicular to the centerline will be measured with a 10-foot straightedge across all lanes with the same cross slope, including shoulders when composed of cement concrete pavement. The overlapping 10-foot straightedge measurement shall be discontinued at a point 6 inches from the most extreme outside edge of the finished cement concrete pavement. The completed surface of the wearing course shall not vary more than 1/4 inch from the lower edge of a 10-foot straightedge placed on the surface perpendicular to the centerline. Any deviations in excess of the above tolerances shall be corrected.

The Contractor shall evaluate profiles for acceptance, incentive payments, disincentive payments, or corrective action using the current version of ProVAL and provide the results including the profile data in unfiltered electronic Engineering Research Division (ERD) file format to the Engineer within 2 calendar days of completing testing each section of pavement. If the profile data files are created using an export option in the manufacturer's software where filter settings can be specified, use the filter settings that were used to

create data files for certification. Analyze the entire profile. Exclude any areas specifically identified in the Contract. Exclude from the analysis the first 100 feet after the start of the paving operations and last 100 feet prior to the end of the paving operation, the first 100 feet on either side of bridge Structures and bridge approach slab. Report the MRI results in inches per mile for each 52.8 foot section and horizontal distance measurements in project stationing to the nearest foot. Include pay adjustments in the results. The Engineer will verify the analysis.

Corrective work for pavement smoothness may be taken by the Contractor prior to MRI testing. After completion of the MRI testing the Contractor shall measure the smoothness of each 52.8-foot section with an MRI greater than 125 inches per mile with a 10-foot straightedge within 14 calendar days or as allowed by the Engineer. The Contractor shall identify all locations that require corrective work and provide the straight edge measurements at each location that exceeds the allowable limit to the Engineer. If all measurements in a 52.8-foot section comply with smoothness requirements, the Contractor shall provide the maximum measurement to the Engineer and a statement that corrective work is not required. Unless allowed by the Engineer, corrective work shall be taken by the Contractor for pavement identified by the Contractor or Engineer that does not meet the following requirements:

- 1. The completed surface shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds.
- 2. The completed surface shall not vary more than ½ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.
- 3. The completed surface shall vary not more than ¼ inch in 10 feet from the rate of transverse slope shown in the Plans.

All corrective work shall be completed at no additional expense, including traffic control, to the Contracting Agency. Corrective work shall not begin until the concrete has reached its design strength unless allowed by the Engineer. Pavement shall be repaired by one or more of the following methods:

- Diamond grinding; repairs shall not reduce pavement thickness by more than ¼ inch less than the thickness shown in the Plans. When required by the Engineer, the Contractor shall verify the thickness of the concrete pavement by coring. Thickness reduction due to corrective work will not be included in thickness measurements for calculating the Thickness Deficiency in Section 5-05.5(1)A.
- 2. Removal and replacement of the cement concrete pavement.
- 3. By other method allowed by the Engineer.

For repairs following MRI testing the repaired area shall be checked by the Contractor with a 10-foot straightedge to ensure it no longer requires corrective work. With concurrence of the Engineer an inertial profiler may be used in place of the 10-foot straight edge.

If correction of the roadway as listed above either will not or does not produce satisfactory results as to smoothness or serviceability the Engineer may accept the completed pavement and a credit will be calculated in accordance with Section 5-05.5. The credit

will be in addition to the price adjustment for MRI. Under these circumstances, the decision whether to accept the completed pavement or to require corrective work as described above shall be vested entirely in the Engineer.

# 5-05.3(22) Repair of Defective Pavement Slabs

The last sentence of the fourth paragraph is revised to read:

All sandblasting residue shall be removed.

#### 5-05.4 Measurement

Item number 3 of the second paragraph is revised to read:

3. The depth shall be determined in accordance with Section 5-05.5(1). The depth utilized to calculate the volume shall not exceed the Plan depth plus 0.04 feet.

The third paragraph is revised to read:

The volume of cement concrete pavement in each thickness lot shall equal the measured length × width × thickness measurement.

The last paragraph is revised to read:

The calculation for cement concrete compliance adjustment is the volume of concrete represented by the CPF and the Thickness deficiency adjustment.

#### **5-05.5** Payment

The paragraph following the Bid item "Cement Conc. Pavement", per cubic yard is supplemented with the following:

All costs associated with performing the magnetic pulse induction thickness testing shall be included in the unit Contract price per cubic yard for "Cement Conc. Pavement".

The Bid item "Ride Smoothness Compliance Adjustment", by calculation, and the paragraph following this bid item are revised to read:

"Ride Smoothness Compliance Adjustment", by calculation.

Smoothness Compliance Adjustments will be based on the requirements in Section 5-05.3(12) and the following calculations:

- 1. Final MRI acceptance and incentive/disincentive payments for pavement smoothness will be calculated as the average of the ten 52.8-foot sections in each 528 feet in accordance with the price adjustment schedule.
  - a. For sections of a lane that are a minimum of 52.8 feet and less than 528 feet, the price adjustment will be calculated using the average of the 52.8 foot MRI values and the price adjustment prorated for the length of the section.
  - b. MRI values per 52.8-feet that were measured prior to corrective work will be included in the 528 foot price adjustment for sections with corrective work.

2. In addition to the price adjustment for MRI a smoothness compliance adjustment will be calculated in the sum of minus \$1000.00 for each and every section of single traffic lane 52.8 feet in length in that does not meet the 10-foot straight edge requirements in Section 5-05.3(12) after corrective Work.

**Price Adjustment Schedule** 

Price Adjustme	nt Schedule
MRI for each 528 ft.	Pay Adjustment
section	Schedule
in. / mi.	\$ / 0.10 mi.
< 30	2400
30	2400
31	2320
32	2240
33	2160
34	2080
35	2000
36	1920
37	1840
38	1760
39	1680
40	1600
41	1520
42	1440
43	1360
44	1280
45	1200
46	1120
47	1040
48	960
49	880
50	800
51	720
52	640
53	560
54	480
55	400
56	320
57	240
58	160
59	80
60	0
61	0
62	0
63	0
64	0
65	0
66	0
67	0
68	0
69	0

70	Λ
70	0
71	0
72	0
73	0
74	0
75	0
76	-80
77	-160
78	-240
79	-320
80	-400
81	-480
82	-560
83	-640
84	-720
85	-800
86	-880
87	-960
88	-1040
89	-1120
90	-1200
91	-1280
92	-1360
93	-1440
94	-1520
95	-1600
96	-1680
97	-1760
98	-1840
99	-1920
100	
	-2000
101	-2080
102	-2160
103	-2240
104	-2320
105	-2400
106	-2480
107	-2560
108	-2640
109	-2720
110	-2800
111	-2880
112	-2960
113	-3040
114	-3120
115	-3200
116	-3280
117	-3360
118	-3440
119	-3520
120	-3600
	•

121	-3680
122	-3760
123	-3840
124	-3920
≥125	-4000

1 2 3

The bid item "Portland Cement Concrete Compliance Adjustment", by calculation, and the paragraph following this bid item are revised to read:

4 5

"Cement Concrete Compliance Adjustment", by calculation.

Payment for "Cement Concrete Compliance Adjustment" will be calculated by multiplying the unit Contract price for the cement concrete pavement, times the volume for adjustment, times the percent of adjustment determined from the calculated CPF and the Deficiency Adjustment listed in Section 5-05.5(1)A.

10 11

12

13

#### 5-05.5(1) Pavement Thickness

This section is revised to read:

18

Cement concrete pavement shall be constructed in accordance with the thickness requirements in the Plans and Specifications. Tolerances allowed for Subgrade construction and other provisions, which may affect thickness, shall not be construed to modify such thickness requirements.

19 20 21

Thickness measurements in each lane paved shall comply with the following:

Thickness Testing of Cement Concrete Pavement		
Thickness Lot Size	15 panels maximum	
Thickness test location determined by	Engineer will select testing locations in	
Thickness test location determined by	accordance with WSDOT TM 716 method B.	
Sample method	AASHTO T 359	
Sample preparation performed by	Contractor provides, places, and secures disks	
Sample preparation penormed by	in the presence of the Engineer <sup>1</sup>	
Measurement method	AASHTO T 359	
Thickness measurement performed by	Contractor, in the presence of the Engineer <sup>2</sup>	
<sup>1</sup> Reflectors shall be located at within 0.5 feet of the center of the panel. The Contr		

<sup>1</sup>Reflectors shall be located at within 0.5 feet of the center of the panel. The Contractor shall supply a sufficient number of 300 mm-diameter round reflectors meeting the requirements of AASHTO T 359 to accomplish the required testing.

<sup>2</sup>The Contractor shall provide all equipment and materials needed to perform the testing.

22 23

Thickness measurements shall be rounded to the nearest 0.01 foot.

24 25 26

27

Each thickness test location where the pavement thickness is deficient by more than 0.04 foot, shall be subject to price reduction or corrective action as shown in Table 2.

Table 2 Thickness Deficiency		
0.04' < Thickness Deficiency ≤ 0.06'	10	
0.06' < Thickness deficiency ≤ 0.08'	25	
Thickness deficiency > 0.08'	Remove and replace the panels or the panels may be accepted with no payment at the discretion of the Engineer.	

 The price reduction shall be computed by multiplying the percent price reduction in Table 2 by the unit Contract price by the volume of pavement represented by the thickness test lot.

Additional cores may be taken by the Contractor to determine the limits of an area that has a thickness deficiency greater than 0.04 feet. Cores shall be taken at the approximate center of the panel. Only the panels within the limits of the deficiency area as determined by the cores will be subject to a price reduction or corrective action. The cores shall be taken in the presence of the Engineer and delivered to the Engineer for measurement. All costs for the additional cores including filling the core holes with patching material meeting the requirements of Section 9-20 will be the responsibility of the Contractor.

# 5-05.5(1)A Thickness Deficiency of 0.05 Foot or Less

This section, including title, is revised to read:

5-05.5(1)A Vacant

# 5-05.5(1)B Thickness Deficiency of More Than 0.05 Foot

This section, including title, is revised to read:

5-05.5(1)B Vacant

6-01.AP6
Section 6-01, General Requirements for Structures
January 7, 2019

This section is supplemented with the following new subsections:

# 6-01.16 Repair of Defective Work 6-01.16(1) General

When using repair procedures that are described elsewhere in the Contract Documents, the Working Drawing submittal requirements of this Section shall not apply to those repairs unless noted otherwise.

Repair procedures for defective Work shall be submitted as Type 2 Working Drawings. Type 2E Working Drawings shall be submitted when required by the Engineer. As an alternative to submitting Type 2 or 2E Working Drawings, defective Work within the limits of applicability of a pre-approved repair procedure may be repaired using that procedure. Repairs using a pre-approved repair procedure shall be submitted as a Type 1 Working Drawing.

Pre-approved repair procedures shall consist of the following:

- The procedures listed in Section 6-01.16(2)
- For precast concrete, repair procedures in the annual plant approval process documents that have been approved for use by the Contracting Agency.

All Working Drawings for repair procedures shall include:

- A description of the defective Work including location, extent and pictures
- Materials to be used in the repair. Repairs using manufactured products shall include written manufacturer recommendations for intended uses of the product, surface preparation, mixing, aggregate extension (if applicable), ambient and surface temperature limits, placement methods, finishing and curing.
- Construction procedures
- Plan details of the area to be repaired
- Calculations for Type 2E Working Drawings

Material manufacturer's instructions and recommendations shall supersede any conflicting requirements in pre-approved repair procedures.

The Engineer shall be notified prior to performing any repair procedure and shall be given an opportunity to inspect the repair work being performed.

#### 6-01.16(2) Pre-Approved Repair Procedures 6-01.16(2)A Concrete Spalls and Poor Consolidation (Rock Pockets, Honeycombs, Voids, etc.)

This repair shall be limited to the following areas:

- Areas that are not on top Roadway surfaces (with or without an overlay) including but not limited to concrete bridge decks, bridge approach slabs or cement concrete pavement
- Areas that are not underwater
- Areas that are not on precast barrier, except for the bottom 4 inches (but not to exceed 1 inch above blockouts)
- Areas that do not affect structural adequacy as determined by the Engineer.

The repair procedure is as follows:

1. Remove all loose and unsound concrete. Impact breakers shall not exceed 15 pounds in weight when removing concrete adjacent to reinforcement or other embedments and shall not exceed 30 pounds in weight otherwise. Operate impact breakers at angles less than 45 degrees as measured from the surface of the concrete to the tool and moving away from the edge of the defective Work. Concrete shall be completely removed from exposed surfaces of existing steel reinforcing bars. If half or more of the circumference of any steel reinforcing bar is exposed, if the reinforcing bar is loose or if the bond to existing concrete is poor then concrete shall be removed at least 3/4 inch behind the reinforcing bar. Do not damage any existing reinforcement. Stop work and allow the Engineer to inspect the repair

- area after removing all loose and unsound concrete. Submit a modified repair procedure when required by the Engineer.
- 2. Square the edges of the repair area by cutting an edge perpendicular to the concrete surface around the repair area. The geometry of the repair perimeter shall minimize the edge length and shall be rectangular with perpendicular edges, avoiding reentrant corners. The depth of the cut shall be a minimum of ¾ inch, but shall be reduced if necessary to avoid damaging any reinforcement. For repairs on vertical surfaces, the top edge shall slope up toward the front at a 1-vertical-to-3-horizontal slope.
- 3. Remove concrete within the repair area to a depth at least matching the cut depth at the edges. Large variations in the depth of removal within short distances shall be avoided. Roughen the concrete surface. The concrete surface should be roughened to at least Concrete Surface Profile (CSP) 5 in accordance with ICRI Guideline No. 310.2R, unless a different CSP is recommended by the patching material manufacturer.
- 4. Inspect the concrete repair surface for delaminations, debonding, microcracking and voids using hammer tapping or a chain drag. Remove any additional loose or unsound concrete in accordance with steps 1 through 3.
- 5. Select a patching material in accordance with Section 9-20.2 that is appropriate for the repair location and thickness. The concrete patching material shall be pumpable or self-consolidating as required for the type of placement that suits the repair. The patching material shall have a minimum compressive strength at least equal to the specified compressive strength of the concrete.
- 6. Prepare the concrete surface and reinforcing steel in accordance with the patching material manufacturer's recommendations. At a minimum, clean the concrete surfaces (including perimeter edges) and reinforcing steel using oil-free abrasive blasting or high-pressure (minimum 5,000 psi) water blasting. All dirt, dust, loose particles, rust, laitance, oil, film, microcracked/bruised concrete or foreign material of any sort shall be removed. Damage to the epoxy coating on steel reinforcing bars shall be repaired in accordance with Section 6-02.3(24)H.
- Construct forms if necessary, such as for patching vertical or overhead surfaces or where patching extends to the edge or corner of a placement.
- 8. When recommended by the patching material manufacturer, saturate the concrete in the repair area and remove any free water at the concrete surface to obtain a saturated surface dry (SSD) substrate. When recommended by the patching material manufacturer, apply a primer, scrub coat or bonding agent to the existing surfaces. Epoxy

1 2 3		bonding agents, if used, shall be Type II or Type V in accordance with Section 9-26.1.	
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	9.	Place and consolidate the patching material in accordance with the manufacturer's recommendations. Work the material firmly into all surfaces of the repair area with sufficient pressure to achieve proper bond to the concrete.	
	10.	The patching material shall be textured, cured and finished in accordance with the patching material manufacturer's recommendations and/or the requirements for the repaired component. Protect the newly placed patch from vibration in accordance with Section 6-02.3(6)D.	
	11.	When the completed repair does not match the existing concrete color and will be visible to the public, a sand and cement mixture that is color matched to the existing concrete shall be rubbed, brushed, or applied to the surface of the patching material and the concrete.	
19 20 21 22	<b>6-01.10 Utilities Supported by or Attached to Bridges</b> In the third paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".		
23 24 25	6-01.12 Final Clea The second sentence	nup of the first paragraph is revised to read:	
26 27	Structure decks shall be clean.		
28 29	The second paragraph is deleted.		
30 31 32	6-02.AP6 Section 6-02, Concrete Structures April 1, 2019		
33 34 35	<b>6-02.1 Description</b> The first sentence is r		
36 37 38 39		ts of the construction of all Structures (and their parts) made of portland ed hydraulic cement concrete with or without reinforcement, including slabs.	
40 41 42 43	6-02.2 Materials In the first paragraph Cement Concrete" are	, the references to "Portland Cement" and "Aggregates for Portland e revised to read:	
44 45	Cement Aggregates for C	9-01 oncrete 9-03.1	
46 47 48	The reference to meta	ıkaolin is deleted.	
49 50 51	<b>6-02.3(2) Proportion</b> The second paragrap		

Unless otherwise specified, the Contractor shall use Type I or II portland cement or blended hydraulic cement in all concrete as defined in Section 9-01.2(1).

4

The last sentence of the fifth paragraph is revised to read:

5 6

7

With the Engineer's written concurrence, microsilica fume may be used in all classifications of Class 4000, Class 3000, and commercial concrete and is limited to a maximum of 10 percent of the cementitious material.

8 9 10

# 6-02.3(2)A Contractor Mix Design

11 12 The last sentence of the last paragraph is revised to read:

13 14 For all other concrete, air content shall be a minimum of 4.5 percent and a maximum of 7.5 percent for all concrete placed above the finished ground line unless noted otherwise.

15 16

# 6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D

17 18 19

Item number 6 of the first paragraph (after the preceding Amendment is applied) is renumbered to 5.

20 21

# 6-02.3(2)B Commercial Concrete

22 23

The second paragraph is revised to read:

Item number 5 of the first paragraph is deleted.

24 25 26

27

28

29

30

Where concrete Class 3000 is specified for items such as, culvert headwalls, plugging culverts, concrete pipe collars, pipe anchors, monument cases, Type PPB, PS, I, FB and RM signal standards, pedestals, cabinet bases, guardrail anchors, fence post footings, sidewalks, concrete curbs, curbs and gutters, and gutters, the Contractor may use commercial concrete. If commercial concrete is used for sidewalks, concrete curbs, curbs and gutters, and gutters, it shall have a minimum cementitious material content of 564 pounds per cubic yard of concrete, shall be air entrained, and the tolerances of Section 6-02.3(5)C shall apply.

31 32 33

#### 6-02.3(4) Ready-Mix Concrete

35 36

34

The first sentence of the first paragraph is revised to read:

37 38 All concrete, except lean concrete, shall be batched in a prequalified manual, semiautomatic, or automatic plant as described in Section 6-02.3(4)A.

39 40

# 6-02.3(4)D Temperature and Time For Placement

The following is inserted after the first sentence of the first paragraph:

41 42 43

The upper temperature limit for placement for Class 4000D concrete may be increased to a maximum of 80°F if allowed by the Engineer.

44 45

# 6-02.3(5)C Conformance to Mix Design

46 47 48

Item number 1 of the second paragraph is revised to read:

49

1. Cement weight plus 5 percent or minus 1 percent of that specified in the mix design.

51

# 6-02.3(6)A1 Hot Weather Protection

The first paragraph is revised to read:

50

The Contractor shall provide concrete within the specified temperature limits. Cooling of the coarse aggregate piles by sprinkling with water is permitted provided the moisture content is monitored, the mixing water is adjusted for the free water in the aggregate and the coarse aggregate is removed from at least 1 foot above the bottom of the pile. Sprinkling of fine aggregate piles with water is not allowed. Refrigerating mixing water or replacing all or part of the mixing water with crushed ice is permitted, provided the ice is completely melted by placing time.

The second sentence of the second paragraph is revised to read:

These surfaces include forms, reinforcing steel, steel beam flanges, and any others that touch the concrete.

#### 6-02.3(7) Vacant

This section, including title, is revised to read:

#### 6-02.3(7) **Tolerances**

Unless noted otherwise, concrete construction tolerances shall be in accordance with this section. Tolerances in this section do not apply to cement concrete pavement.

Horizontal deviation of roadway crown points, cross-slope break points, and curb, barrier or railing edges from alignment or work line: ±1.0 inch

Deviation from plane: ±0.5 inch in 10 feet

Deviation from plane for roadway surfaces: ±0.25 inch in 10 feet

Deviation from plumb or specified batter: ±0.5 inch in 10 feet, but not to exceed a total of ±1.5 inches

Vertical deviation from profile grade for roadway surfaces: ±1 inch

Vertical deviation of top surfaces (except roadway surfaces): ±0.75 inch

Thickness of bridge decks and other structural slabs not at grade: ±0.25 inch

Length, width and thickness of elements such as columns, beams, crossbeams, diaphragms, corbels, piers, abutments and walls, including dimensions to construction joints in initial placements: +0.5 inch, -0.25 inch

Length, width and thickness of spread footing foundations: +2 inches, -0.5 inch

Horizontal location of the as-placed edge of spread footing foundations: The greater of  $\pm 2\%$  of the horizontal dimension of the foundation perpendicular to the edge and  $\pm 0.5$  inch. However, the tolerance shall not exceed  $\pm 2$  inches.

Location of opening, insert or embedded item at concrete surface: ±0.5 inch

Cross-sectional dimensions of opening: ±0.5 inch

Horizontal deviation of centerline of supported element from centerline of bearing pad, oak block or other bearing assembly ±0.25 inch

Vertical deviation of top of bearing pad, oak block or other bearing assembly: ±0.125 inch

### 6-02.3(10)C Finishing Equipment

The first paragraph is revised to read:

 The finishing machine shall be self-propelled and be capable of forward and reverse movement under positive control. The finishing machine shall be equipped with augers and a rotating cylindrical single or double drum screed. The finishing machine shall have the necessary adjustments to produce the required cross section, line, and grade. The finishing machine shall be capable of raising the screeds, augers, and any other parts of the finishing mechanical operation to clear the screeded surface, and returning to the specified grade under positive control. Unless otherwise allowed by the Engineer, a finishing machine manufacturer technical representative shall be on site to assist the first use of the machine on the Contract.

The first sentence of the second paragraph is revised to read:

For bridge deck widening of 20 feet or less, and for bridge approach slabs, or where jobsite conditions do not allow the use of the conventional configuration finishing machines, or modified conventional machines as described above; the Contractor may submit a Type 2 Working Drawing proposing the use of a hand-operated motorized power screed such as a "Texas" or "Bunyan" screed.

# **6-02.3(10)D4** Monitoring Bridge Deck Concrete Temperature After Placement This section, including title, is revised to read:

#### 6-02.3(10)D4 Vacant

#### 6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing

In the third subparagraph of the first paragraph, the last sentence is revised to read:

The Contractor shall texture the bridge deck surface to within 3-inches minimum and 24-inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of the perimeter of bridge drain assemblies.

#### 6-02.3(10)F Bridge Approach Slab Orientation and Anchors

The second to last paragraph is revised to read:

The compression seal shall be a  $2\frac{1}{2}$  inch wide gland and shall conform to Section 9-04.1(4).

The last paragraph is deleted.

## 6-02.3(13)A Strip Seal Expansion Joint System

In item number 3 of the third paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

# **6-02.3(13)B** Compression Seal Expansion Joint System The first paragraph is revised to read:

Compression seal glands shall conform to Section 9-04.1(4) and be sized as shown in the Plans.

# **6-02.3(14)C** Pigmented Sealer for Concrete Surfaces This section is supplemented with the following new paragraph:

Pigmented Sealer Materials shall be a product listed in the current WSDOT Qualified Products List (QPL). If the pigmented sealer material is not listed in the current WSDOT QPL, a sample shall be submitted to the State Materials Laboratory in Tumwater for evaluation and acceptance in accordance with Section 9-08.3.

## 6-02.3(20) Grout for Anchor Bolts and Bridge Bearings

The second, third and fourth paragraphs are revised to read:

 Grout shall be a workable mix with a viscosity that is suitable for the intended application. Grout shall not be placed outside of the manufacturer recommended range of thickness. The Contractor shall receive concurrence from the Engineer before using the grout.

Field grout cubes and cylinders shall be fabricated and tested in accordance with Section 9-20.3 when requested by the Engineer, but not less than once per bridge pier or once per day.

Before placing grout, the substrate on which it is to be placed shall be prepared as recommended by the manufacturer to ensure proper bonding. The grout shall be cured as recommended by the manufacturer. The grout may be loaded when a minimum of 4,000 psi compressive strength is attained.

The fifth paragraph is deleted.

## 6-02.3(23) Opening to Traffic

 This section is supplemented with the following new paragraph:

 After curing bridge approach slabs in accordance with Section 6-02.3(11), the bridge approach slabs may be opened to traffic when a minimum compressive strength of 2,500 psi is achieved.

# **6-02.3(24)** C Placing and Fastening This section is revised to read:

The Contractor shall position reinforcing steel as the Plans require and shall ensure that the steel is set within specified tolerances. Adjustments to reinforcing details outside of specified tolerances to avoid interferences and for other purposes are acceptable when approved by the Engineer.

17

18

22

23

24

25 26 27

29 30 31

32

28

33 34 35

36

41

42

43 44 45

46

47 48 49

50

51

When spacing between bars is 1 foot or more, they shall be tied at all intersections. When spacing is less than 1 foot, every other intersection shall be tied. If the Plans require bundled bars, they shall be tied together with wires at least every 6 feet. All epoxy-coated bars in the top mat of the bridge deck shall be tied at all intersections, however they may be tied at alternate intersections when spacing is less than 1 foot in each direction and they are supported by continuous supports meeting all other requirements of supports for epoxy-coated bars. Other epoxy-coated bars shall also be tied at all intersections, but shall be tied at alternate intersections when spacing is less than 1 foot in each direction. Wire used for tying epoxy-coated reinforcing steel shall be plastic coated. Tack welding is not permitted on reinforcing steel.

Abrupt bends in the steel are permitted only when one steel member bends around another. Vertical stirrups shall pass around main reinforcement or be firmly attached to it.

For slip-formed concrete, the reinforcing steel bars shall be tied at all intersections and cross braced to keep the cage from moving during concrete placement. Cross bracing shall be with additional reinforcing steel. Cross bracing shall be placed both longitudinally and transversely.

After reinforcing steel bars are placed in a traffic or pedestrian barrier and prior to slipform concrete placement, the Contractor shall check clearances and reinforcing steel bar placement. This check shall be accomplished by using a template or by operating the slip-form machine over the entire length of the traffic or pedestrian barrier. All clearance and reinforcing steel bar placement deficiencies shall be corrected by the Contractor before slip-form concrete placement.

Precast concrete supports (or other accepted devices) shall be used to maintain the concrete coverage required by the Plans. The precast concrete supports shall:

- Have a bearing surface measuring not greater than 2 inches in either dimension, and
- Have a compressive strength equal to or greater than that of the concrete in which they are embedded.

In slabs, each precast concrete support shall have either: (1) a grooved top that will hold the reinforcing bar in place, or (2) an embedded wire that protrudes and is tied to the reinforcing steel. If this wire is used around epoxy-coated bars, it shall be coated with plastic.

Precast concrete supports may be accepted based on a Manufacturer's Certificate of Compliance.

In lieu of precast concrete supports, the Contractor may use metal or all-plastic supports to hold uncoated bars. Any surface of a metal support that will not be covered by at least ½ inch of concrete shall be one of the following:

- Hot-dip galvanized after fabrication in keeping with AASHTO M232 Class D;
- 2. Coated with plastic firmly bonded to the metal. This plastic shall be at least 3/32 inch thick where it touches the form and shall not react chemically with the concrete when tested in the State Materials Laboratory. The plastic shall not

shatter or crack at or above -5°F and shall not deform enough to expose the metal at or below 200°F; or

3. Stainless steel that meet the requirements of ASTM A493, Type 302. Stainless steel chair supports are not required to be galvanized or plastic coated.

In lieu of precast concrete supports, epoxy-coated reinforcing bars may be supported by one of the following:

- 1. Metal supports coated entirely with a dielectric material such as epoxy or plastic,
- 2. Other epoxy-coated reinforcing bars, or
- 3. All-plastic supports.

Damaged coatings on metal bar supports shall be repaired prior to placing concrete.

All-plastic supports shall be lightweight, non-porous, and chemically inert in concrete. All-plastic supports shall have rounded seatings, shall not deform under load during normal temperatures, and shall not shatter or crack under impact loading in cold weather. All-plastic supports shall be placed at spacings greater than 1 foot along the bar and shall have at least 25 percent of their gross place area perforated to compensate for the difference in the coefficient of thermal expansion between plastic and concrete. The shape and configuration of all-plastic supports shall permit complete concrete consolidation in and around the support.

A "mat" is two adjacent and perpendicular layers of reinforcing steel. In bridge decks, top and bottom mats shall be supported adequately enough to hold both in their proper positions. If bar supports directly support, or are directly supported on No. 4 bars, they shall be spaced at not more than 3-foot intervals (or not more than 4-foot intervals for bars No. 5 and larger). Wire ties to girder stirrups shall not be considered as supports. To provide a rigid mat, the Contractor shall add other supports and tie wires to the top mat as needed.

Unless noted otherwise, the minimum concrete cover for main reinforcing bars shall be:

- 3 inches to a concrete surface deposited against earth without intervening forms.
- 2½ inches to the top surface of a concrete bridge deck or bridge approach slab.
- 2 inches to a concrete surface when not specified otherwise in this section or in the Contract documents.
- 1½ inches to a concrete barrier or curb surface.

Except for top cover in bridge decks and bridge approach slabs, minimum concrete cover to ties and stirrups may be reduced by ½ inch but shall not be less than 1 inch. Minimum concrete cover shall also be provided to the outermost part of mechanical splices and headed steel reinforcing bars.

Reinforcing steel bar location, concrete cover and clearance shall not vary more than the following tolerances from what is specified in the Contract documents:

 Reinforcing bar location for members 12 inches or less in thickness: ±0.25 inch

Reinforcing bar location for members greater than 12 inches in thickness: ±0.375 inch

Reinforcing bar location for bars placed at equal spacing within a plane: the greater of either ±1 inch or ±1 bar diameter within the plane. The total number of bars shall not be fewer than that specified.

The clearance between reinforcement shall not be less than the greater of the bar diameter or 1 inch for unbundled bars. For bundled bars, the clearance between bundles shall not be less than the greater of 1 inch or a bar diameter derived from the equivalent total area of all bars in the bundle.

Longitudinal location of bends and ends of bars: ±1 inch

Embedded length of bars and length of bar lap splices:

No. 3 through No. 11: -1 inch

No. 14 through No. 18: -2 inches

Concrete cover measured perpendicular to concrete surface (except for the top surface of bridge decks, bridge approach slabs and other roadway surfaces): ±0.25 inch

Concrete cover measured perpendicular to concrete surface for the top surface of bridge decks, bridge approach slabs and other roadway surfaces: +0.25 inch, -0 inch

Before placing any concrete, the Contractor shall:

- 1. Clean all mortar from reinforcement, and
- 2. Obtain the Engineer's permission to place concrete after the Engineer has inspected the placement of the reinforcing steel. (Any concrete placed without the Engineer's permission shall be rejected and removed.)

#### 6-02.3(25)H Finishing

The last paragraph is revised to read:

The Contractor may repair defects in prestressed concrete girders in accordance with Section 6-01.16.

#### 6-02.3(25) Fabrication Tolerances

Item number 12 of the first paragraph is revised to read:

12. Stirrup Projection from Top of Girder:

Wide flange thin deck and slab girders:  $\pm \frac{1}{2}$  inch

All other girders:  $\pm \frac{3}{4}$  inch

1			
2	6-02.3(27) Concrete for Precast Units		
3	The last sentence of the first paragraph is revised to read:		
4			
5 6	Type III portland cement or blended hydraulic cement is permitted to be used in precast concrete units.		
7	0.00.0(00) 7.0(		
8	6-02.3(28)B Casting		
9	In the second paragraph, the reference to Section 6-02.3(25)B is revised to read Section 6-		
10	02.3(25)C.		
11	6.02.2/20\D. Contractors Control Strongth		
12 13 14 15	<b>6-02.3(28)D Contractors Control Strength</b> In the first paragraph, "WSDOT FOP for AASHTO T 23" is revised to read "FOP for AASHTO T 23".		
16	6-02.3(28)E Finishing		
17	This section is supplemented with the following:		
18	9		
19 20	The Contractor may repair defects in precast panels in accordance with Section 6-01.16.		
21	6-03.AP6		
22	Section 6-03, Steel Structures		
23	January 7, 2019		
24	6-03.2 Materials		
25	In the first paragraph, the material reference for Paints is revised to read:		
26	Paints and Related Materials 9-08		
27 28	Fairlis and Related Materials 9-00		
29	6-03.3(25)A3 Ultrasonic Inspection		
30	The first paragraph (up until the colon) is revised to read:		
31	The met paragraph (ap and the edien) is revised to read.		
32 33	Complete penetration groove welds on plates 5/16 inch and thicker in the following welded assemblies or Structures shall be 100 percent ultrasonically inspected:		
34			
35	6-03.3(33) Bolted Connections		
36	The first paragraph is supplemented with the following:		
37			
38	After final tightening of the fastener components, the threads of the bolts shall at a		
39	minimum be flush with the end of the nut.		
40			
41	The following is inserted after the third sentence of the fourth paragraph:		
42	When advanized helts are enseified tension control advanized helts are not normitted		
43 44	When galvanized bolts are specified, tension-control galvanized bolts are not permitted.		
45	6-05.AP6		
46	Section 6-05, Piling		
47	January 2, 2018		
48	6-05.3(9)A Pile Driving Equipment Approval		
49	The fourth sentence of the second paragraph is revised to read:		

1	
2	
3	

For prestressed concrete piles, the allowable driving stress in kips per square inch shall be  $0.095 \cdot \sqrt{f'_c}$  plus prestress in tension, and  $0.85f'_c$  minus prestress in compression, where  $f'_c$  is the concrete compressive strength in kips per square inch.

6-07.AP6

7 Section 6-07, Painting8 January 7, 2019

## 6-07.1 Description

The first sentence is revised to read:

This work consists of containment, surface preparation, shielding adjacent areas from work, testing and disposing of debris, furnishing and applying paint, and cleaning up after painting is completed.

#### 6-07.2 Materials

The material reference for Paint is revised to read:

Paint and Related Materials

9-08

## 6-07.3(1)A Work Force Qualifications for Shop Application of Paint

This section is supplemented with the following new sentence:

The work force may be accepted based on the approved facility.

## 6-07.3(1)B Work Force Qualifications for Field Application of Paint

The first two paragraphs are revised to read:

The Contractor preparing the surface and applying the paint shall be certified under SSPC-QP 1 or NACE International Institute Contractor Accreditation Program (NIICAP) AS 1.

The Contractor removing and otherwise disturbing existing paint containing lead and other hazardous materials shall be certified under SSPC-QP 2, Category A or NIICAP AS 2.

The third paragraph (up until the colon) is revised to read:

In lieu of the above SSPC or NIICAP certifications, the Contractor performing the specified work shall complete both of the following actions:

Item number 2 of the third paragraph is revised to read:

2. The Contractor's quality control inspector(s) for the project shall be NACE-certified CIP Level 3 or SSPC Protective Coating Inspector (PCI) Level 3.

## 6-07.3(2) **Submittals**

 The first paragraph is supplemented with the following:

 Each component of the plan shall identify the specification section it represents.

3.

4.

10 11

12

13 14 15

16 17

18

19 20 21

22

23 24 25

26 27 28

29

30 31 32

33 34 35

36 37 38

39

40

41

42 43 44

45

46 47 48

49 50 51

52

5. Example of each completed form(s) of the daily quality control report used to document the inspection work and tests performed by the Contractor's quality control personnel.

## 6-07.3(2)C Paint System Manufacturer and Paint System Information Submittal Component

The paint system manufacturer's recommended methods of preventing defects.

The Contractor's frequency of quality control inspection for each phase of work.

Item number 1 is revised to read:

- Product data sheets and Safety Data Sheets (SDS) on the paint materials, paint preparation, and paint application, as specified by the paint manufacturer, including:
  - All application instructions, including the mixing and thinning directions.
  - b. Recommended spray nozzles and pressures.
  - Minimum and maximum drying time between coats. C.
  - Restrictions on temperature and humidity. d.
  - Repair procedures for shop and field applied coatings. e.
  - f. Maximum dry film thickness for each coat.
  - Minimum wet film thickness for each coat to achieve the specified minimum dry g. film thickness.

## 6-07.3(2)D Hazardous Waste Containment, Collection, Testing, and Disposal **Submittal Component**

The first paragraph (up until the colon) is revised to read:

The hazardous waste containment, collection, testing, and disposal shall meet all Federal and State requirements, and the submittal component of the painting plan shall include the following:

## 6-07.3(2)E Cleaning and Surface Preparation Submittal Component

Item 1(b) of the first paragraph is revised to read::

Type, manufacturer, and brand of abrasive blast material and all associated b. additives, including Safety Data Sheets (SDS).

16 17	Item number 5 in the fourth paragraph is revised to read:
18 19 20	<ol><li>Surface profile by Keanne-Tator comparator in accordance with ASTM D 4417 and SSPC PA17.</li></ol>
21	6-07.3(4) Paint System Manufacturer's Technical Representative
22	This section is revised to read:
23	
24 25	The paint system manufacturer's representative shall be present at the jobsite for the pre- painting conference and for the first day of paint application, and shall be available to the
26 27	Contractor and Contracting Agency for consultation for the full project duration.
28	6-07.3(5) Pre-Painting Conference
29	The second paragraph is revised to read:
30 31	If the Contractor's key personnel change between any work operations, an additional
32	conference shall be held if requested by the Engineer.
33	<b>3</b>
34	6-07.3(6)A Paint Containers
35 36	In item number 2 of the first paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".
37	Standard 393 .
38	6-07.3(6)B Paint Storage
39	Item number 2 of the second paragraph is revised to read:
40 41	2. The Contractor shall monitor and document daily the paint material storage facility
+ 1 12	with a high-low recording thermometer device.
13	
14	6-07.3(7) Paint Sampling and Testing
45 46	The first two paragraphs are revised to read:
16 17	The Contractor shall provide the Engineer 1 quart of each paint representing each lot.
48	Samples shall be accompanied with a Safety Data Sheet.
19	
50 51	If the quantity of paint required for each component of the paint system for the entire
51 52	project is 20 gallons or less, then the paint system components will be accepted as specified in Section 9-08.1(7).

6-07.3(3)B Quality Control and Quality Assurance for Field Application of

The last sentence of the first paragraph (excluding the numbered list) is revised to read:

Environmental conditions for painting in accordance with ASTM E 337.

documenting the following for each working day:

Item number 1 in the fourth paragraph is revised to read:

Item number 4 in the fourth paragraph is revised to read:

The Contractor's quality control operations shall include a minimum monitoring and

Pictorial of surface preparation guides in accordance with SSPC-VIS 1, 3, 4, and 5.

1

2

3

4 5

6

7 8

9 10

11 12

13 14

15

**Paint** 

4.

## 6-07.3(8)A Paint Film Thickness Measurement Gages

The first paragraph is revised to read:

Paint dry film thickness measurements shall be performed with either a Type 1 pull-off gage or a Type 2 electronic gage as specified in SSPC Paint Application Specification No. 2, Procedure for Determining Conformance to Dry Coating Thickness Requirements.

## 6-07.3(9) Painting New Steel Structures

 The last sentence of the second paragraph is revised to read:

Welded shear connectors are not required to painted.

The last paragraph is revised to read:

Temporary attachments or supports for scaffolding, containment or forms shall not damage the paint system.

## 6-07.3(9)A Paint System

The first paragraph is revised to read:

The paint system applied to new steel surfaces shall consist of the following:

Option 1 (component based paint system):

Primer Coat – Inorganic Zinc Rich	9-08.1(2)C
Intermediate Coat – Moisture Cured Polyurethane	9-08.1(2)G
Intermediate Stripe Coat – Moisture Cured Polyurethane	9-08.1(2)G
Top Coat – Moisture Cured Polyurethane	9-08.1(2)H

Option 2 (performance based paint system):

Primer Coat – Inorganic Zinc Rich 9-08.1(2)M Intermediate Coat – Epoxy 9-08.1(2)M Intermediate Stripe Coat – Epoxy 9-08.1(2)M Top Coat – Polyurethane 9-08.1(2)M

The following new paragraph is inserted after the first paragraph:

Paints and related materials shall be products listed in the current WSDOT Qualified Products List (QPL). Component based paint systems shall be listed on the QPL in the applicable sections of Section 9-08. Performance based systems shall be listed on the current Northeast Protective Coatings Committee (NEPCOAT) Qualified Products List "A" as listed on the WSDOT QPL in Section 9-08.1(2)M. If the paint and related materials for the component based system is not listed in the current WSDOT QPL, a sample shall be submitted to the State Materials Laboratory in Tumwater for evaluation and acceptance in accordance with Section 9-08.

## 6-07.3(9)C Mixing and Thinning Paint

This section is revised to read:

The Contractor shall thoroughly mix paint in accordance with the manufacturer's written recommendations and by mechanical means to ensure a uniform and lump free composition. Paint shall not be mixed by means of air stream bubbling or boxing. Paint shall be mixed in the original containers and mixing shall continue until all pigment or metallic powder is in suspension. Care shall be taken to ensure that the solid material that has settled to the bottom of the container is thoroughly dispersed. After mixing, the Contractor shall inspect the paint for uniformity and to ensure that no unmixed pigment or lumps are present.

Catalysts, curing agents, hardeners, initiators, or dry metallic powders that are packaged separately may be added to the base paint in accordance with the paint manufacturer's written recommendations and only after the paint is thoroughly mixed to achieve a uniform mixture with all particles wetted. The Contractor shall then add the proper volume of curing agent to the correct volume of base and mix thoroughly. The mixture shall be used within the pot life specified by the manufacturer. Unused portions shall be discarded at the end of each work day. Accelerants are not permitted except as allowed by the Engineer.

The Contractor shall not add additional thinner at the application site except as allowed by the Engineer. The amount and type of thinner, if allowed, shall conform to the manufacturer's specifications. If recommended by the manufacturer and allowed by the Engineer, a measuring cup shall be used for the addition of thinner to any paint with graduations in ounces. No un-measured addition of thinner to paint will be allowed. Any paint found to be thinned by unacceptable methods will be rejected.

When recommended by the manufacturer, the Contractor shall constantly agitate paint during application by use of paint pots equipped with mechanical agitators.

The Contractor shall strain all paint after mixing to remove undesirable matter, but without removing the pigment or metallic powder.

Paint shall be stored and mixed in a secure, contained location to eliminate the potential for spills into State waters and onto the ground and highway surfaces.

## 6-07.3(9)D Coating Thickness

This section is revised to read:

Dry film thickness shall be measured in accordance with SSPC Paint Application Specification No. 2, *Procedure for Determining Conformance to Dry Coating Thickness Requirements*.

The minimum dry film thickness of the primer coat shall not be less than 2.5 mils.

The minimum dry film thickness of each coat (combination of intermediate and intermediate stripe, and top) shall be not less than 3.0 mils.

The dry film thickness of each coat shall not be thicker than the paint manufacturer's recommended maximum thickness.

The minimum wet film thickness of each coat shall be specified by the paint manufacturer to achieve the minimum dry film thickness.

 Film thickness, wet and dry, will be measured by gages conforming to Section 6-07.3(8)A.

Wet measurements will be taken immediately after the paint is applied in accordance with ASTM D4414. Dry measurements will be taken after the coating is dry and hard in accordance with SSPC Paint Application Specification No. 2.

Each painter shall be equipped with wet film thickness gages and shall be responsible for performing frequent checks of the paint film thickness throughout application.

Coating thickness measurements may be made by the Engineer after the application of each coat and before the application of the succeeding coat. In addition, the Engineer may inspect for uniform and complete coverage and appearance. One hundred percent of all thickness measurements shall meet or exceed the minimum wet film thickness. In areas where wet film thickness measurements are impractical, dry film thickness measurements may be made. If a question arises about an individual coat's thickness or coverage, it may be verified by the use of a Tooke gage in accordance with ASTM D4138.

If the specified number of coats does not produce a combined dry film thickness of at least the sum of the thicknesses required per coat, if an individual coat does not meet the minimum thickness, or if visual inspection shows incomplete coverage, the coating system will be rejected and the Contractor shall discontinue painting and surface preparation operations and shall submit a Type 2 Working Drawing of the repair proposal. The repair proposal shall include documentation demonstrating the cause of the less-than-minimum thickness, along with physical test results, as necessary, and modifications to Work methods to prevent similar results. The Contractor shall not resume painting or surface preparation operations until receiving the Engineer's acceptance of the completed repair.

**6-07.3(9)E** Surface Temperature Requirements Prior to Application of Paint This section, including title, is revised to read:

# 6-07.3(9)E Environmental Condition Requirements Prior to Application of Paint

Paint shall be applied only during periods when:

- 1. Air and steel temperatures are in accordance with the paint manufacturer's recommendations but in no case less than 35°F nor greater than 115°F.
- 2. Steel surface temperature is a minimum of 5°F above the dew point.
- 3. Steel surface is not wet.
- 4. Relative humidity is within the manufacturer's recommended range.
- 5. The anticipated ambient temperature will remain above 35°F or the manufacturer's minimum temperature, whichever is greater, during the paint drying and curing period.

Application will not be allowed if conditions are not favorable for proper application and performance of the paint.

Paint shall not be applied when weather conditions are unfavorable to proper curing. If a paint system manufacturer's recommendations allow for application of a paint under environmental conditions other than those specified, the Contractor shall submit a Type 2 Working Drawing consisting of a letter from the paint manufacturer specifying the environmental conditions under which the paint can be applied. Application of paint under environmental conditions other than those specified in this section will not be allowed without the Engineer's concurrence.

1

2

3

4

5

6

7

8 9 10

11

12 13

14

15

## 6-07.3(9)F Shop Surface Cleaning and Preparation

The last sentence is revised to read:

The entire steel surface to be painted, including surfaces specified in Section 6-07.3(9)G to receive a mist coat of primer, shall be cleaned to a near white condition in accordance with SSPC-SP 10, Near-white Metal Blast Cleaning, and shall be in this condition immediately prior to paint application.

16 17

## 6-07.3(9)G Application of Shop Primer Coat

The first paragraph is supplemented with the following:

Repairs of the shop primer coat shall be prepared in accordance with the painting plan. Shop primer coat repair paint shall be selected from the approved component based or

performance based paint system in accordance with Section 6-07.3(10)H.

24

### 6-07.3(9)H Containment for Field Coating

This section is revised to read:

The Contractor shall use a containment system in accordance with Section 6-07.3(10)A for surface preparation and prime coating of all uncoated areas remaining, including bolts. nuts, washers, and splice plates.

32

During painting operations of the intermediate, stripe and top coats the Contractor shall furnish, install, and maintain drip tarps below the areas to be painted to contain all spilled paint, buckets, brushes, and other deleterious material, and prevent such materials from reaching the environment below or adjacent to the structure being painted. Drip tarps shall be absorbent material and hung to minimize puddling. The Contractor shall evaluate the project-specific conditions to determine the specific type and extent of containment needed to control the paint emissions and shall submit a containment plan in accordance with Section 6-07.3(2).

39

#### 6-07.3(9) Application of Field Coatings

This section is revised to read:

43

An on-site supervisor shall be present for each work shift at the bridge site.

46

Upon completion of erection Work, all uncoated or damaged areas remaining, including bolts, nuts, washers, and splice plates, shall be prepared in accordance with Section 6-07.3(9)F, followed by a field primer coat of a zinc-rich primer and final coats of paint selected from the approved component or performance based paint system in accordance with Section 6-07.3(10)H. . The intermediate, intermediate stripe, and top coats shall be applied in accordance with the manufacturer's written recommendations.

1 2 3

Upon completion of erection Work, welds for steel column jackets may be prepared in accordance with SSPC-SP 15, Commercial Grade Power Tool Cleaning.

The minimum drying time between coats shall be as shown in the product data sheets, but not less than 12 hours. The Contractor shall determine whether the paint has cured sufficiently for proper application of succeeding coats.

The maximum time between intermediate and top coats shall be in accordance with the manufacturer's written recommendations. If the maximum time between coats is exceeded, all newly coated surfaces shall be prepared to SSPC-SP 7, *Brush-off Blast Cleaning*, and shall be repainted with the same paint that was cleaned, at no additional cost to the Contracting Agency.

Each coat shall be applied in a uniform layer, completely covering the preceding coat. The Contractor shall correct runs, sags, skips, or other deficiencies before application of succeeding coats. Such corrective work may require re-cleaning, application of additional paint, or other means as determined by the Engineer, at no additional cost to the Contracting Agency.

Dry film thickness measurements will be made in accordance with Section 6-07.3(9)D.

All paint damage that occurs shall be repaired in accordance with the manufacturer's written recommendations. On bare areas or areas of insufficient primer thickness, the repair shall include field-applied zinc-rich primer and the final coats of paint selected from the approved component or performance based paint system in accordance with Section 6-07.3(10)H. On areas where the primer is at least equal to the minimum required dry film thickness, the repair shall include the application of the final two coats of the paint system. All paint repair operations shall be performed by the Contractor at no additional cost or time to the Contracting Agency.

#### 6-07.3(10)A Containment

Emissions shall be assessed by Visible Emission Observations (Method A) in SSPC Technology Update No. 7, Conducting Ambient Air, Soil, and Water Sampling of Surface Preparation and Paint Disturbance Activities, Section 6.2 and shall be limited to the Level

## 6-07.3(10)D Surface Preparation Prior to Overcoat Painting

A Acceptance Criteria Option Level 0 Emissions standard.

The first sentence of the third paragraph is revised to read:

The Contractor shall remove any visible oil, grease, and road tar in accordance with SSPC-SP 1, Solvent Cleaning.

The second paragraph is revised to read:

The first paragraph is revised to read:

Following any preparation by SSPC-SP1, all steel surfaces to be painted shall be prepared in accordance with SSPC-SP 7, *Brush-off Blast Cleaning*. Surfaces inaccessible to brush-off blast shall be prepared in accordance with SSPC-SP 3, *Power Tool Cleaning*, as allowed by the Engineer.

The first sentence of the third paragraph is revised to read:

Following brush-off blast cleaning, the Contractor shall perform spot abrasive blast cleaning in accordance with SSPC-SP 6, Commercial Blast Cleaning.

The second to last sentence of the third paragraph is revised to read:

For small areas, as allowed by the Engineer, the Contractor may substitute cleaning in accordance with SSPC-SP 15, Commercial Grade Power Tool Cleaning.

## 6-07.3(10)G Treatment of Pack and Rust Gaps

The second paragraph is revised to read:

Pack rust forming a gap between steel surfaces of  $\gamma_{16}$  to  $\gamma_{16}$  inch shall be cleaned to a depth of at least one half of the gap width. The gaps shall be cleaned and prepared in accordance with SSPC-SP6. The cleaned gap shall be treated with rust penetrating sealer, prime coated, and then caulked to form a watertight seal along the top edge and the two sides of the steel pieces involved, using the rust penetrating sealer and caulk as accepted by the Engineer. The bottom edge or lowest edge of the steel pieces involved shall not be caulked.

The third paragraph is supplemented with the following:

Caulk shall be a single-component urethane sealant conforming to Section 9-08.7.

The fifth paragraph is revised to read:

At locations where gaps between steel surfaces exceed ¼ inch, the Contractor shall clean and prepare the gap in accordance SSPC-SP6, apply the rust penetrating sealer, apply the prime coat, and then fill the gap with foam backer rod material as accepted by the Engineer. The foam backer rod material shall be of sufficient diameter to fill the crevice or gap. The Contractor shall apply caulk over the foam backer rod material to form a watertight seal.

This section is supplemented with the following new paragraph:

Caulk and backer rod, if needed, shall be placed prior to applying the top coat. The Contractor, with the concurrence of the Engineer, may apply the rust penetrating sealer after application of the prime coat provided the primer is removed in the areas to be sealed. The areas to be sealed shall be re-cleaned and re-prepared in accordance with SSPC-SP6.

## 6-07.3(10)H Paint System

system:

The first paragraph is revised to read:

The paint system applied to existing steel surfaces shall consist of the following five-coat

Option 1 (component based system):

Primer Coat – Zinc-filled Moisture Cured Polyurethane 9-08.1(2)F Primer Stripe Coat - Moisture Cured Polyurethane 9-08.1(2)F Intermediate Coat - Moisture Cured Polyurethane 9-08.1(2)G

1	Intermediate Stripe Coat - Moisture Cured Polyurethane	9-08.1(2)G
2	Top Coat - Moisture Cured Polyurethane	9-08.1(2)H
3		
4	Option 2 (performance based system):	
5		
6	Primer Coat – Zinc-rich Epoxy	9-08.1(2)N
7	Primer Stripe Coat – Epoxy	9-08.1(2)N
8	Intermediate Coat – Epoxy	9-08.1(2)N
9	Intermediate Stripe Coat – Epoxy	9-08.1(2)N
10	Top Coat – Polyurethane	9-08.1(2)N
11		

The following new paragraph is inserted after the first paragraph:

Paints and related materials shall be a product listed in the current WSDOT Qualified Products List (QPL). Component based paint systems shall be listed on the QPL in the applicable sections of Section 9-08. Performance based systems shall be listed on the current Northeast Protective Coatings Committee (NEPCOAT) Qualified Products List "B" as listed on the WSDOT QPL in Section 9-08.1(2)N. If the paint and related material for the component based system is not listed in the current WSDOT QPL, a sample shall be submitted to the State Materials Laboratory in Tumwater for evaluation and acceptance in accordance with Section 9-08.

## 6-07.3(10)J Mixing and Thinning Paint

This section is revised to read:

Mixing and thinning paint shall be in accordance with Section 6-07.3(9)C.

## 6-07.3(10)K Coating Thickness

This section is revised to read:

Coating thickness shall be in accordance with Section 6-07.3(9)D except the minimum dry film thickness of each coat (combination of primer and primer stripe, combination of

# 6-07.3(10)L Environmental Condition Requirements Prior to Application of Paint

intermediate and intermediate stripe, and top) shall not be less than 3.0 mils.

This section is revised to read:

Environmental conditions shall be in accordance with Section 6-07.3(9)E.

# 6-07.3(10)M Steel Surface Condition Requirements Prior to Application of Paint

The third paragraph is revised to read:

Edges of existing paint shall be feathered in accordance with SSPC-PA 1, Shop, Field, and Maintenance Coating of Metals, Note 15.20.

# **6-07.3(10)N** Field Coating Application Methods The third sentence is revised to read:

The Contractor may apply stripe coat paint using spray or brush but shall follow spray application using a brush to ensure complete coverage around structural geometric

irregularities and to push the paint into gaps between existing steel surfaces and around rivets and bolts.

## 6-07.3(10)O Applying Field Coatings

The second to last paragraph is revised to read:

Each application of primer, primer stripe, intermediate, intermediate stripe, and top coat shall be considered as separately applied coats. The Contractor shall not use a preceding or subsequent coat to remedy a deficiency in another coat. The Contractor shall apply the top coat to at least the minimum specified top coat thickness, to provide a uniform appearance and consistent finish coverage.

### 6-07.3(10)P Field Coating Repair

The second sentence is revised to read:

Repair areas shall be cleaned of all damaged paint and the system reapplied using all coats typical to the paint system and shall meet the minimum coating thickness.

## 6-07.3(11)A Painting of Galvanized Surfaces

This section is revised to read:

All galvanized surfaces receiving paint shall be prepared for painting in accordance with the ASTM D 6386. The method of preparation shall be brush-off in accordance with SSPC-SP16 Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals or as otherwise allowed by the Engineer. The Contractor shall not begin painting until receiving the Engineer's acceptance of the prepared galvanized surface. For galvanized bolts used for replacement of deteriorated existing rivets, the Contractor, with the concurrence of the Engineer and after successful demonstration testing, may prepare galvanized surfaces in accordance with SSPC-SP1 followed by SSPC-SP2, Hand Tool Cleaning or SSPC-SP3, Power Tool Cleaning. The demonstration testing shall include adhesion testing of the first coat of paint over galvanized bolts, nuts, and washers or a representative galvanized surface. Adhesion testing shall be performed in accordance with ASTM D 4541 for 600 psi minimum adhesion. A minimum of 3 successful tests shall be performed on the galvanized surface prepared and painted using the same methods and materials to be used on the galvanized bolts, nuts and washers in the field.

#### 6-07.3(11)A2 Paint Coat Materials

This section is revised to read:

The Contractor shall paint the dry surface as follows:

- 1. The first coat over a galvanized surface shall be an epoxy polyamide conforming to Section 9-08.1(2)E. In the case of galvanized bolts used for replacement of deteriorated existing rivets and for small surface areas less than or equal to one square foot, an intermediate moisture cured polyurethane conforming to Section 9-08.1(2)G may be used as a first coat. In both cases the first coat shall be compatible with galvanizing and as recommended by the top coat manufacturer.
- 2. The second coat shall be a top coat moisture cured aliphatic polyurethane conforming to Section 9-08.1(2)H or a top coat polyurethane conforming to

Section 6-07.3(10)H Option 2 NEPCOAT performance based paint specification compatible with the first coat as recommended by the manufacturer.

Each coat shall be dry before the next coat is applied. All coats applied in the shop shall be dried hard before shipment.

### 6-07.3(11)B Powder Coating of Galvanized Surfaces

This section is revised to read:

Powder coating of galvanized surfaces shall consist of the following coats:

- 1. The first coat shall be an epoxy powder primer coat conforming to Section 9-08.2.
- 2. The second coat shall be a polyester finish coat conforming to Section 9-08.2.

## 6-07.3(11)B3 Galvanized Surface Cleaning and Preparation

The first three paragraphs are revised to read:

Galvanized surfaces receiving the powder coating shall be cleaned and prepared for coating in accordance with ASTM D 7803, and the project-specific powder coating plan.

Assemblies conforming to the ASTM D 7803 definition for newly galvanized steel shall receive surface smoothing and surface cleaning in accordance with ASTM D 7803, Section 5, and surface preparation in accordance with ASTM D 7803, Section 5.1.3.

Assemblies conforming to the ASTM D 7803 definition for partially weathered galvanized steel shall be checked and prepared in accordance with ASTM D 7803, Section 6, before then receiving surface smoothing and surface cleaning in accordance with ASTM D 7803, Section 5, and surface preparation in accordance with ASTM D 7803, Section 5.1.3.

The fourth paragraph (up until the colon) is revised to read:

Assemblies conforming to the ASTM D 7803 definition for weathered galvanized steel shall be prepared in accordance with ASTM D 7803, Section 7 before then receiving surface smoothing and surface cleaning in accordance with ASTM D 7803, Section 5, and surface preparation in accordance with ASTM D 7803, Section 5.3 except as follows:

### 6-07.3(11)B5 Testing

Item number 4 in the first paragraph is revised to read:

4. Adhesion testing in accordance with ASTM D 4541 for 600 psi minimum adhesion for the complete two-component system.

The second sentence of the fourth paragraph is revised to read:

Rejected assemblies shall be repaired or recoated by the Contractor, at no additional expense to the Contracting Agency, in accordance with the powder coating manufacturer's recommendation as detailed in the project-specific powder coating plan, until the assemblies satisfy the acceptance testing requirements.

## 6-07.3(12) Painting Ferry Terminal Structures

This section is revised to read:

Painting of ferry terminal Structures shall be in accordance with Section 6-07.3 as supplemented below.

This section is supplemented with the following new subsections:

## 6-07.3(12)A Painting New Steel Ferry Terminal Structures

Painting of new steel Structures shall be in accordance with Section 6-07.3(9) except that all coatings (primer, intermediate, intermediate stripe, and top) shall be applied in the shop with the following exceptions:

1. Steel surfaces to be field welded.

2. Steel surfaces to be greased.

3. The length of piles designated in the Plans not requiring painting.

The minimum drying time between coats shall be as shown in the product data sheets, but not less than 12 hours. The Contractor shall determine whether the paint has cured sufficiently for proper application of succeeding coats.

### 6-07.3(12)A1 Paint Systems

Paint systems for Structural Steel, which includes vehicle transfer spans and towers, pedestrian overhead loading structures and towers, upland structural steel and other elements as designated in the Special Provisions shall be as specified in Section 6-07.3(9)A.

Paint systems for Piling, Landing Aids and Life Ladders shall be as specified in the Special Provisions.

#### 6-07.3(12)A2 Paint Color

Paint colors shall be as specified in the Special Provisions.

## 6-07.3(12)A3 Coating Thickness

 Coating thicknesses shall be as specified in the Special Provisions.

#### 6-07.3(12)A4 Application of Field Coatings

 An on-site supervisor shall be present for each work shift at the project site.

Upon completion of erection Work, all uncoated or damaged areas remaining, including bolts, nuts, washers, splice plates, and field welds shall be prepared in accordance with SSPC-SP 1, Solvent Cleaning, followed by SSPC-SP 11, *Power Tool Cleaning to Bare Metal*. Surface preparation shall be measured according to SSPC-VIS 3. SSPC-SP 11 shall be performed for a minimum distance of 1 inch from the uncoated or damaged area. In addition, intact shop-applied coating surrounding the area shall be abraded or sanded for a distance of 6 inches out from the properly prepared clean/bare metal areas to provide adequate roughness for application of field coatings. All sanding dust and contamination shall be removed prior to application of field coatings.

Field applied paint for Structural Steel shall conform to Section 6-07.3(10)H, as applicable. Field applied paint for Piling, Landing Aids and Life Ladders shall be as specified in the Special Provisions.

For areas above the tidal zone, the minimum drying time between coats shall be as shown in the product data sheets, but not less than 12 hours. For areas within the tidal zone, the minimum drying time between coats shall be as recommended by the paint system manufacturer. The Contractor shall determine whether the paint has cured sufficiently for proper application of succeeding coats.

The maximum time between intermediate and top coats shall be in accordance with the manufacturer's written recommendations. If the maximum time between coats is exceeded, all newly coated surfaces shall be prepared to SSPC-SP 3, *Power Tool Cleaning*, and shall be repainted with the same paint that was cleaned, at no additional cost to the Contracting Agency.

Each coat shall be applied in a uniform layer, completely covering the preceding coat. The Contractor shall correct runs, sags, skips, or other deficiencies before application of succeeding coats. Such corrective work may require re-cleaning, application of additional paint, or other means as determined by the Engineer, at no additional cost to the Contracting Agency.

Surface preparation for underwater locations shall consist of removing all dirt, oil, grease, loose paint, loose rust, and marine growth from the area that is to be repaired. The sound paint surrounding the damaged area shall be roughened to meet the requirements of the manufacturer. Paint for underwater applications shall be as specified in the Special Provisions and shall be applied in accordance with the manufacturer's recommendations.

#### 6-07.3(12)B Painting Existing Steel Ferry Terminal Structures

Painting of existing steel structures shall be in accordance with Section 6-07.3(10) as supplemented by the following.

#### 6-07.3(12)B1 Containment

Containment for full removal shall be in accordance with Section 6-07.3(10)A. Containment for overcoat systems shall be in accordance with all applicable Permits as required in the Special Provisions.

Prior to cleaning the Contractor shall enclose all exposed electrical and mechanical equipment to seal out dust, water, and paint. Non-metallic surfaces shall not be abrasive blasted or painted. Unless otherwise specified, the following metallic surfaces shall not be painted and shall be protected from abrasive blasting and painting:

- 1. Galvanized and stainless steel surfaces not previously painted,
- 2. Non-skid surfaces,
- 3. Unpainted intentionally greased surfaces,
- 4. Equipment labels, identification plates, tags, etc.,

- 5. Fire and emergency containers or boxes,
- 6. Mechanical hardware such as hoist sheaves, hydraulic cylinders, gear boxes, wire rope, etc.

The Contractor shall submit a Type 2 Working Drawing consisting of materials and equipment used to shield components specified to not be cleaned and painted. The Contractor shall shut off the power prior to working around electrical equipment. The Contractor shall follow the lock-out/tag-out safety provisions of the WAC 296-803 and all other applicable safety standards.

#### 6-07.3(12)B2 Surface Preparation

For applications above high water and within the tidal zone, surface preparation for overcoat painting shall be in accordance with SSPC-SP 1, *Solvent Cleaning*, followed by SSPC-SP 3, *Power Tool Cleaning*. Use of wire brushes is not allowed. After SP 3 cleaning has been completed all surfaces exhibiting coating failure down to the steel substrate, and those exhibiting visible corrosion, shall be prepared down to clean bare steel in accordance with SSPC-SP 15, Commercial Grade *Power Tool Cleaning*. Surface preparation shall be measured according to SSPC-VIS 3. SSPC-SP 15 shall be performed for a minimum distance of 1 inch from the area exhibiting failure or visible corrosion. In addition, intact shop-applied coating surrounding the repair area shall be abraded or sanded for a distance of 6 inches out from the properly prepared clean/bare metal areas to provide adequate roughness for application of repair coatings. All sanding dust and contamination shall be removed prior to application of repair coatings. Surface preparation for full paint removal shall be in accordance with Section 6-07.3(10)E except SSPC-SP 11 will be permitted as detailed in the Contractor's painting plan and as allowed by the Engineer.

Surface preparation for underwater locations shall consist of removing all dirt, oil, grease, loose paint, loose rust, and marine growth from the area that is to be repaired. The sound paint surrounding the damaged area shall be roughened as required by the coating manufacturer.

Removed marine growth may be released to state waters provided the marine growth is not mixed with contaminants (paint, oil, rust, etc.) and it shall not accumulate on the sea bed. All marine growth containing contaminants shall be collected for proper disposal.

Surface preparation for the underside of bridge decks (consisting of either a steel grid system of main bars or tees and a light gauge metal form, in-filled with concrete or a corrugated light gauge metal form, infilled with concrete) shall be in accordance with SSPC-SP 2, *Hand Tool Cleaning* or SSPC-SP 3, *Power Tool Cleaning* with the intent of not causing further damage to the light gauge metal form. Following removal of any pack rust and corroded sections from the underside of the bridge deck, cleaning and flushing to remove salts and prior to applying the primer coat, the Contractor shall seal the entire underside of the deck system with rust-penetrating sealer. Damage to galvanized metal forms and/or grids shall be repaired in accordance with ASTM A 780, with the preferred method of repair using paints containing zinc dust.

#### 1 6-07.3(12)B3 Paint Systems 2 Paints systems for Structural Steel, which includes vehicle transfer spans and 3 towers, pedestrian overhead loading structures and towers, upland structural steel 4 and other elements as designated in the Special Provisions shall be as specified in 5 Section 6-07.3(10)H. 6 7 Paint systems for Piling, Landing Aids, Life Ladders, underside of vehicle transfer 8 span bridge decks, non-skid surface treated areas, and anti-graffiti coatings shall be 9 as specified in the Special Provisions. 10 11 6-07.3(12)B4 Paint Color 12 Paint colors shall be as specified in the Special Provisions. 13 14 6-07.3(12)B5 Coating Thickness Coating thicknesses shall be as specified in the Special Provisions. 15 16 17 6-07.3(12)B6 Application of Field Coatings 18 Application of field coatings shall be in accordance with Section 6-07.3(10)O and 19 Section 6-07.3(12)A2 except for the following: 20 21 All coatings applied in the field shall be applied using a brush or roller. Spray 22 application methods may be used if allowed by the Engineer. 23 24 Applied coatings shall not be immersed until the coating has been cured as 25 required by the coating manufacturer. 26 27 Non-skid surface treatment products shall be applied in accordance with 28 the manufacturer's recommendations. 29 30 4. Anti-graffiti coatings shall be applied in one coat following application of the 31 top coat, where specified in the Plans. 32 33 6-07.3(14)B Reference Standards 34 The second standard reference (to SSPC CS 23.00), and its accompanying title, is revised to 35 read: 36 37 SSPC CS 23.00 Specification for the Application of Thermal Spray Coatings 38 (Metallizing) of Aluminum, Zinc, and Their Alloys and 39 Composites for the Corrosion Protection of Steel 40 41 6-08 AP6 42 Section 6-08, Bituminous Surfacing on Structure Decks **January 7, 2019** 43 6-08.3(7)A Concrete Deck Preparation 44 45 The first sentence of the first paragraph is revised to read: 46 47 The Contractor, with the Engineer, shall inspect the exposed concrete deck to establish the extent of bridge deck repair in accordance with Section 6-09.3(6). 48 49

6-08.3(8) A Structure Deck Preparation

The second sentence of the last paragraph is revised to read:

50

Prior to applying the primer or sheet membrane, all dust and loose material shall be removed from the Structure Deck.

6-09.AP6

Section 6-09, Modified Concrete Overlays

**January 7, 2019** 

## 6-09.3 Construction Requirements

This section is supplemented with the following new subsection:

## 6-09.3(15) Sealing and Texturing Concrete Overlay

After the requirements for checking for bond have been met, all joints and visible cracks shall be filled and sealed with a high molecular weight methacrylate resin (HMWM). Cracks 1/16 inch and greater in width shall receive two applications of HMWM. Immediately following the application of HMWM, the wetted surface shall be coated with sand for abrasive finish.

After all cracks have been filled and sealed and the HMWM resin has cured, the concrete overlay surface shall receive a longitudinally sawn texture in accordance with Section 6-02.3(10)D5.

Traffic shall not be permitted on the finished concrete until it has reached a minimum compressive strength of 3,000 psi as verified by rebound number determined in accordance with ASTM C805 and the longitudinally sawn texture is completed.

## 6-09.3(1)B Rotary Milling Machines

This section is revised to read:

Rotary milling machines used to remove an upper layer of existing concrete overlay, when present, shall have a maximum operating weight of 50,000 pounds and conform to Section 6-08.3(5)B.

### 6-09.3(1)C Hydro-Demolition Machines

The first sentence of this section is revised to read:

Hydro-demolition machines shall consist of filtering and pumping units operating in conjunction with a remote-controlled robotic device, using high-velocity water jets to remove sound concrete to the nominal scarification depth shown in the Plans with a single pass of the machine, and with the simultaneous removal of deteriorated concrete.

## 6-09.3(1)D Shot Blasting Machines

This section, including title, is revised to read:

#### 6-09.3(1)D Vacant

# **6-09.3(1)E** Air Compressor This section is revised to read:

47 This section

Air compressors shall be equipped with oil traps to eliminate oil from being blown onto the bridge deck.

## 6-09.3(1)J Finishing Machine

This section is revised to read:

The finishing machine shall meet the requirements of Section 6-02.3(10) and the following requirements:

The finishing machine shall be equipped with augers, followed by an oscillating, vibrating screed, vibrating roller tamper, or a vibrating pan, followed by a rotating cylindrical double drum screed. The vibrating screed, roller tamper or pan shall be of sufficient length and width to properly consolidate the mixture. The vibrating frequency of the vibrating screed, roller tamper or pan shall be variable with positive control.

## 6-09.3(2) Submittals

 Item number 1 and 2 are revised to read:

  A Type 1 Working Drawing consisting of catalog cuts and operating parameters of the hydro-demolition machine selected by the Contractor for use in this project to scarify concrete surfaces.

2. A Type 1 Working Drawing consisting of catalog cuts, operating parameters, axle loads, and axle spacing of the rotary milling machine (if used to remove an upper layer of existing concrete overlay when present).

The first sentence of item number 3 is revised to read:

The first sentence of the fourth paragraph is revised to read:

A Type 2 Working Drawing of the Runoff Water Disposal Plan.

## 6-09.3(5)A General

All areas of the deck that are inaccessible to the selected scarifying machine shall be scarified to remove the concrete surface matrix to a maximum nominal scarification depth shown in the Plans by a method acceptable to the Engineer.

This section is supplemented with the following:

Concrete process water generated by scarifying concrete surface and removing existing concrete overlay operations shall be contained, collected, and disposed of in accordance with Section 5-01.3(11) and Section 6-09.3(5)C, and the Section 6-09.3(2) Runoff Water Disposal Plan.

## 6-09.3(5)B Testing of Hydro-Demolition and Shot Blasting Machines

 This section's title is revised to read:

The second paragraph is revised to read:

## **Testing of Hydro-Demolition Machines**

In the "sound" area of concrete, the equipment shall be programmed to remove concrete to the nominal scarification depth shown in the Plans with a single pass of the machine.

### 6-09.3(5)D Shot Blasting

This section, including title, is revised to read:

6-09.3(5)D Vacant

## 6-09.3(5)E Rotomilling

This section, including title, is revised to read:

## 6-09.3(5)E Removing Existing Concrete Overlay Layer by Rotomilling

When the Contractor elects to remove the upper layer of existing concrete overlay, when present, by rotomilling prior to final scarifying, the entire concrete surface of the bridge deck shall be milled to remove the surface matrix to the depth specified in the Plans with a tolerance as specified in Section 6-08.3(5)B. The operating parameters of the rotary milling machine shall be monitored in order to prevent the unnecessary removal of concrete below the specified removal depth.

### 6-09.3(6) Further Deck Preparation

The first paragraph is revised to read::

Once the lane or strip being overlaid has been cleaned of debris from scarifying, the Contractor, with the Engineer, shall perform a visual inspection of the scarified surface. The Contractor shall mark those areas of the existing bridge deck that are authorized by the Engineer for further deck preparation by the Contractor.

Item number 4 of the second paragraph is deleted.

The first sentence of the third paragraph is deleted.

## 6-09.3(6)A Equipment for Further Deck Preparation

This section is revised to read:

Further deck preparation shall be performed using either power driven hand tools conforming to Section 6-09.3(1)A, or hydro-demolition machines conforming to Section 6-09.3(1)C.

### 6-09.3(6)B Deck Repair Preparation

The second paragraph is deleted.

The last sentence of the second paragraph (after the preceding Amendment is applied) is revised to read:

In no case shall the depth of a sawn vertical cut exceed  $\frac{3}{4}$  inch or to the top of the top steel reinforcing bars, whichever is less.

The first sentence of the third to last paragraph is revised to read:

Where existing steel reinforcing bars inside deck repair areas show deterioration greater than 20-percent section loss, the Contractor shall furnish and place steel reinforcing bars alongside the deteriorated bars in accordance with the details shown in the Standard Plans.

The last paragraph is deleted.

## 6-09.3(7) Surface Preparation for Concrete Overlay

The first seven paragraphs are deleted and replaced with the following:

Following the completion of any required further deck preparation the entire lane or strip being overlaid shall be cleaned to be free from oil and grease, rust and other foreign material that may still be present. These materials shall be removed by detergent-cleaning or other method accepted by the Engineer followed by sandblasting.

After detergent cleaning and sandblasting is completed, the entire lane or strip being overlaid shall be cleaned in final preparation for placing concrete.

Hand tool chipping, sandblasting and cleaning in areas adjacent to a lane or strip being cleaned in final preparation for placing concrete shall be discontinued when final preparation is begun. Scarifying and hand tool chipping shall remain suspended until the concrete has been placed and the requirement for curing time has been satisfied. Sandblasting and cleaning shall remain suspended for the first 24 hours of curing time after the completion of concrete placing.

Scarification, and removal of the upper layer of concrete overlay when present, may proceed during the final cleaning and overlay placement phases of the Work on adjacent portions of the Structure so long as the scarification and concrete overlay removal operations are confined to areas which are a minimum of 100 feet away from the defined limits of the final cleaning or overlay placement in progress. If the scarification and concrete overlay removal impedes or interferes in any way with the final cleaning or overlay placement as determined by the Engineer, the scarification and concrete overlay removal Work shall be terminated immediately and the scarification and concrete overlay removal equipment removed sufficiently away from the area being prepared or overlaid to eliminate the conflict. If the grade is such that water and contaminants from the scarification and concrete overlay removal operation will flow into the area being prepared or overlaid, the scarification and concrete overlay removal operation shall be terminated and shall remain suspended for the first 24 hours of curing time after the completion of concrete placement.

#### 6-09.3(11) Placing Concrete Overlay

The first sentence of item number 3 in the fourth paragraph is revised to read:

Concrete shall not be placed when the temperature of the concrete surface is less than 45°F or greater than 75°F, and wind velocity at the construction site is in excess of 10 mph.

## 6-09.3(12) Finishing Concrete Overlay

The third paragraph is deleted.

The last paragraph is deleted.

## 6-09.3(13) Curing Concrete Overlay

The first sentence of the first paragraph is revised to read:

 As the finishing operation progresses, the concrete shall be immediately covered with a single layer of clean, new or used, wet burlap.

1 2	The last sentence of the second paragraph is deleted.
3 4	The following two new paragraphs are inserted after the second paragraph:
5 6 7 8 9	As an alternative to the application of burlap and fog spraying described above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. The Contractor shall submit a Type 2 Working Drawing consisting of details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained.
10 11 12	The wet curing regimen as described shall remain in place for a minimum of 42-hours.
13	The last paragraph is deleted.
14 15 16 17	6-09.3(14) Checking for Bond The first sentence of the first paragraph is revised to read:
18 19 20 21	After the requirements for curing have been met, the entire overlaid surface shall be sounded by the Contractor, in a manner accepted by and in the presence of the Engineer, to ensure total bond of the concrete to the bridge deck.
22	The last sentence of the first paragraph is deleted.
23 24	The second paragraph is deleted.
25 26 27 28	6-10.AP6 Section 6-10, Concrete Barrier August 6, 2018
29	6-10.2 Materials
30 31	In the first paragraph, the reference to "Portland Cement" is revised to read:
32 33	Cement 9-01
34 35 36	6-10.3(6) Placing Concrete Barrier The first two sentences of the first paragraph are revised to read:
37 38 39 40 41 42 43	Precast concrete barriers Type 2, Type 4, Type F, precast single slope barrier, and transitions shall rest on a paved foundation shaped to a uniform grade and section. The foundation surface for precast concrete barriers Type 2, Type 4, Type F, precast single slope barrier, and transitions shall meet this test for uniformity: When a 10-foot straightedge is placed on the surface parallel to the centerline for the barrier, the surface shall not vary more than ½ inch from the lower edge of the straightedge.
44 45 46	6-11.AP6 Section 6-11, Reinforced Concrete Walls April 2, 2018

2019 FLASHING YELLOW ARROW SIGNALS PROJECT CITY OF SAMMAMISH

47

48

49

50

6-11.2 Materials

to read:

In the first paragraph, the reference to "Aggregates for Portland Cement Concrete" is revised

1	Aggregates for Concrete 9-03.1
2 3 4 5	6-12.AP6 Section 6-12, Noise Barrier Walls August 6, 2018
6 7 8	<b>6-12.2 Materials</b> In the first paragraph, the reference to "Aggregates for Portland Cement Concrete" is revised to read:
9 10 11	Aggregates for Concrete 9-03.1
12	The first paragraph is supplemented with the following new material reference:
13 14	Noise Barrier Wall Access Door 9-06.17
15 16 17	6-12.3(9) Access Doors and Concrete Landing Pads The second paragraph is deleted and replaced with the following:
18 19 20 21 22 23	All frame and door surfaces, except stainless steel surfaces, shall be painted in accordance with Section 6-07.3(9). Primer shall be applied to all non-stainless steel surfaces. All primer coated exposed metal surfaces shall be field painted with the remaining Section 6-07.3(9)A paint system coats. The top coat, when dry, shall match the color specified in the Plans or Special Provisions.
24 25	This section is supplemented with the following:
26 27 28 29 30	Access door deadbolt locks shall be capable of accepting a Best CX series core. The Contractor shall furnish and install a spring-loaded construction core lock with each lock. The Engineer will furnish the permanent Best CX series core for the Contractor to install at the conclusion of the project.
31 32	6-13.AP6
33 34	Section 6-13, Structural Earth Walls August 6, 2018
35 36 37 38	<b>6-13.2 Materials</b> In the first paragraph, the reference to "Aggregates for Portland Cement Concrete" is revised to read:
39 40	Aggregates for Concrete 9-03.1
41 42 43	<b>6-13.3(4)</b> Precast Concrete Facing Panel and Concrete Block Fabrication Item number 1 of the sixth paragraph is revised to read:
44 45 46	1. Vertical dimensions shall be $\pm \frac{1}{16}$ inch of the Plan dimension, and the rear height shall not exceed the front height.
46 47 48	Item number 3 of the sixth paragraph is revised to read:
40 49	3. All other dimensions shall be $\pm \frac{1}{4}$ inch of the Plan dimension.

1 6-14 AP6 2 **Section 6-14, Geosynthetic Retaining Walls** 3 **April 2, 2018** 4 6-14.2 Materials 5 In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland 6 Cement Concrete" are revised to read: 7 8 9-01 Cement 9 Aggregates for Concrete 9-03.1 10 6-15.AP6 11 Section 6-15, Soil Nail Walls 12 13 **January 7, 2019** 14 6-15.3(7) Shotcrete Facing The last paragraph is supplemented with the following: 15 16 17 After final tightening of the nut, the threads of the soil nail shall at a minimum be flush 18 with the end of the nut. 19 6-16.AP6 20 Section 6-16, Soldier Pile and Soldier Pile Tieback Walls 21 22 **April 2, 2018** 23 6-16.2 Materials 24 In the first paragraph, the reference to "Aggregates for Portland Cement Concrete" is revised 25 to read: 26 27 Aggregates for Concrete 9-03.1 28 29 6-18.AP6 Section 6-18, Shotcrete Facing 30 31 **April 1, 2019** 32 6-18.2 Materials 33 The reference to metakaolin is deleted. 34 35 6-18.3(3) Testing In the last sentence of the first paragraph, "AASHTO T 24" is revised to read "ASTM C1604". 36 37 38 6-18.3(3)B Production Testing 39 In the last sentence, "AASHTO T 24" is revised to read "ASTM C1604". 40 41 6-18.3(4) Qualifications of Contractor's Personnel 42 In the last sentence of the second paragraph, "AASHTO T 24" is revised to read "ASTM 43 C1604". 44

1 2 3	6-19.AP6 Section 6-19, Shafts January 7, 2019
4 5 6 7	<b>6-19.2 Materials</b> In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland Cement Concrete" are revised to read:
8 9 10	Cement 9-01 Aggregates for Concrete 9-03.1
11 12 13	6-19.3(1)A Shaft Construction Tolerances The last paragraph is supplemented with the following:
14 15 16	The elevation of the top of the reinforcing cage for drilled shafts shall be within +6 inches and -3 inches from the elevation shown in the Plans.
17 18 19	6-19.3(2)D Nondestructive QA Testing Organization and Personnel Item number 4 in the first paragraph is revised to read:
20 21 22 23	<ol> <li>Personnel preparing test reports shall be a Professional Engineer, licensed under Title 18 RCW, State of Washington, and shall seal the report in accordance with WAC 196-23-020.</li> </ol>
24	6-19.3(3)C Conduct of Shaft Casing Installation and Removal and Shaft
25 26 27	Excavation Operations The first paragraph is supplemented with the following:
28 29 30	In no case shall shaft excavation and casing placement extend below the bottom of shaft excavation as shown in the Plans.
31	6-19.3(6)E Thermal Wire and Thermal Access Point (TAPS)
32 33	The third sentence of the third paragraph is revised to read:
34 35 36	The thermal wire shall extend from the bottom of the reinforcement cage to the top of the shaft, with a minimum of 5-feet of slack wire provided above the top of shaft.
37	The following new sentence is inserted after the third sentence of the third paragraph:
38 39 40	All thermal wires in a shaft shall be equal lengths.
41 42	<b>6-19.3(9)D Nondestructive QA Testing Results Submittal</b> The last sentence of the first paragraph is revised to read:

45

2019 FLASHING YELLOW ARROW SIGNALS PROJECT

Results shall be a Type 2E Working Drawing presented in a written report.

1 7-02.AP7 2 Section 7-02, Culverts 3 **April 2, 2018** 4 7-02.2 Materials 5 In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland 6 Cement Concrete" are revised to read: 7 8 9-01 Cement 9 Aggregates for Concrete 9-03.1 10 11 7-02.3(6)A4 Excavation and Bedding Preparation 12 The first sentence of the third paragraph is revised to read: 13 14 The bedding course shall be a 6-inch minimum thickness layer of culvert bedding 15 material, defined as granular material either conforming to Section 9-03.12(3) or to 16 AASHTO Grading No. 57 as specified in Section 9-03.1(4)C. 17 18 7-05.AP7 Section 7-05, Manholes, Inlets, Catch Basins, and Drywells 19 20 August 6, 2018 21 7-05.3 Construction Requirements 22 The fourth sentence of the third paragraph is deleted. 23 24 7-08.AP7 25 Section 7-08, General Pipe Installation Requirements 26 April 2, 2018 27 7-08.3(3) Backfilling 28 The fifth sentence of the fourth paragraph is revised to read: 29 30 All compaction shall be in accordance with the Compaction Control Test of Section 2-31 03.3(14)D except in the case that 100% Recycled Concrete Aggregate is used. 32 33 The following new sentences are inserted after the fifth sentence of the fourth paragraph: 34 35 When 100% Recycled Concrete Aggregate is used, the Contractor may submit a written 36 request to use a test point evaluation for compaction acceptance. Test Point evaluation 37 shall be performed in accordance with SOP 738. 38 39 8-01 AP8 40 Section 8-01, Erosion Control and Water Pollution Control 41 April 1, 2019

#### 8-01.1 Description

This section is revised to read:

43 44 45

46

47

48

42

This Work consists of furnishing, installing, maintaining, removing and disposing of best management practices (BMPs), as defined in the Washington Administrative Code (WAC) 173-201A, to manage erosion and water quality in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

10 11

12 13 14

15 16 17

18

23 24 25

26 27

28

29

30 31 32

> 33 34 35

36 37 38

44 45 46

43

47 48

The Contracting Agency may have a National Pollution Discharge Elimination System Construction Stormwater General Permit (CSWGP) as identified in the Contract Special Provisions. The Contracting Agency may or may not transfer coverage of the CSWGP to the Contractor when a CSWGP has been obtained. The Contracting Agency may not have a CSWGP for the project but may have another water quality related permit as identified in the Contract Special Provisions or the Contracting Agency may not have water quality related permits but the project is subject to applicable laws for the Work. Section 8-01 covers all of these conditions.

This section is supplemented with the following new subsection:

## **8-01.1(1) Definitions**

## 1. pH Affected Stormwater

- Stormwater contacting green concrete (concrete that has set/stiffen but is still curing), recycled concrete, or engineered soils (as defined in the Construction Stormwater General Permit (CSWGP)) as a natural process
- pH monitoring shall be performed in accordance with the CSWGP, or Water Quality Standards (WQS in accordance with WAC 173-201A (surface) or 173-200C (ground)) when the CSWGP does not apply
- May be neutralized and discharged to surface waters or infiltrated

#### 2. pH Affected Non-Stormwater

- Conditionally authorized in accordance with CSWGP Special Condition S.1.C., uncontaminated water contacting green concrete, recycled concrete, or engineered soils (as defined in the CSWGP)
- b. Shall not be categorized as cementitious wastewater/concrete wastewater, as defined below
- Shall be managed and treated in accordance with the CSWGP, or WQS when the CSWGP does not apply
- pH adjustment and dechlorination may be necessary, as specified in the CSWGP or in accordance with WQS when the CSWGP does not apply
- May be neutralized, treated, and discharged to surface waters in accordance with the CSWGP, with the exception of water-only shaft drilling slurry. Wateronly shaft drilling slurry may be treated, neutralized, and infiltrated but not discharged to surface waters (Refer to Special Conditions S1.C. Authorized Discharges and S1.d Prohibited Discharges of the CSWGP)

#### **Cementitious Wastewater/Concrete Wastewater**

Any water that comes into contact with fine cementitious particles or slurry; any water used in the production, placement and/or clean-up of cementitious products; any water used to cut, grind, wash, or otherwise modify cementitious products

- b. When any water, including stormwater, commingles with cementitious wastewater/concrete wastewater, the resulting water is considered cementitious wastewater/concrete wastewater and shall be managed to prevent discharge to waters of the State, including ground water
- c. CSWGP Examples include: water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing)
- d. Cannot be neutralized and discharged or infiltrated

## 8-01.2 Materials

The first paragraph is revised to read:

Materials shall meet the requirements of the following sections:

Corrugated Polyethylene Drain Pipe	9-05.1(6)
Quarry Spalls and Permeable Ballast	9-13
Erosion Control and Roadside Planting	9-14
Construction Geotextile	9-33

The second paragraph is deleted.

## 8-01.3(1) General

This section is revised to read:

Adaptive management shall be employed throughout the duration of the project for the implementation of erosion and water pollution control permit requirements for the current condition of the project site. The adaptive management includes the selection and utilization of BMPs, scheduling of activities, prohibiting unacceptable practices, implementing maintenance procedures, and other managerial practices that when used singularly or in combination, prevent or reduce the release of pollutants to waters of the State. The adaptive management shall use the means and methods identified in this section and means and methods identified in the Washington State Department of Transportation's Temporary Erosion and Sediment Control Manual or the Washington State Department of Ecology's Stormwater Management Manuals for construction stormwater.

The Contractor shall install a high visibility fence along the lines shown in the Plans or as instructed by the Engineer.

Throughout the life of the project, the Contractor shall preserve and protect the delineated preservation area, acting immediately to repair or restore any high visibility fencing damaged or removed.

All discharges to surface waters shall comply with surface water quality standards as defined in Washington Administrative Code (WAC) Chapter 173-201A. All discharges to groundwater shall comply with groundwater quality standards WAC Chapter 173-200. The Contractor shall comply with the CSWGP when the project is covered by the CSWGP.

- Sediment control measures prior to ground disturbing activities to ensure all discharges from construction areas receive treatment prior to discharging from the site.
- 2. Flow control measures to prevent erosive flows from developing.
- 3. Water management strategies and pollution prevention measures to prevent contamination of waters that will be discharged to surface waters or the ground.
- 4. Erosion control measures to stabilize erodible earth not being worked.
- 5. Maintenance of BMPs to ensure continued compliant performance.
- 6. Immediate corrective action if evidence suggests construction activity is not in compliance. Evidence includes sampling data, olfactory or visual evidence such as the presence of suspended sediment, turbidity, discoloration, or oil sheen in discharges.

To the degree possible, the Contractor shall coordinate this Work with permanent drainage and roadside restoration Work the Contract requires.

Clearing, grubbing, excavation, borrow, or fill within the Right of Way shall never expose more erodible earth than as listed below:

Western Washington (West of the Cascade Mountain Crest)	
May 1 through September 30	17 Acres
October 1 through April 30	5 Acres

Eastern Washington (East of the Cascade Mountain Crest)	
April 1 through October 31	17 Acres
November 1 through March 31	5 Acres

The Engineer may increase or decrease the limits based on project conditions.

Erodible earth is defined as any surface where soils, grindings, or other materials may be capable of being displaced and transported by rain, wind, or surface water runoff.

Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time period (see the table below), using BMPs for erosion control.

Western Washington (West of the Cascade Mountain Crest)		
October 1 through April 30	2 days maximum	

(East of the	Eastern Washington (East of the Cascade Mountain Crest)	
October 1 through June 30	5 days maximum	

May 1 to
September 30

7 days maximum

November 1	
through March	
31	

10 days maximum

When applicable, the Contractor shall be responsible for all Work required for compliance with the CSWGP including annual permit fees.

If the Engineer, under Section 1-08.6, orders the Work suspended, the Contractor shall continue to comply with this division during the suspension.

## 8-01.3(1)A Submittals

This section's content is deleted.

This section is supplemented with the following new subsection:

## 8-01.3(1)A1 Temporary Erosion and Sediment Control Plan

Temporary Erosion and Sediment Control (TESC) Plans consist of a narrative section and plan sheets that meets the Washington State Department of Ecology's Stormwater Pollution Prevention Plan (SWPPP) requirement in the CSWGP. For projects that do not require a CSWGP but have the potential to discharge to surface waters of the state, an abbreviated TESC plan shall be used, which may consist of a narrative and/or plan sheets and shall demonstrate compliance with applicable codes, ordinances and regulations, including the water quality standards for surface waters; Chapter 173-201A of the Washington Administrative Code (WAC) and water quality standards for groundwaters in accordance with Chapter 173-200 WAC.

The Contractor shall either adopt the TESC Plan in the Contract or develop a new TESC Plan. If the Contractor adopts the TESC Plan in scenarios in which the CSWGP is transferred to the Contractor, the Contractor shall modify the TESC Plan to match the Contractor's schedule, method of construction, and to include all areas that will be used to directly support construction activity such as equipment staging yards, material storage areas, or borrow areas. TESC Plans shall include all high visibility fence shown in the Plans. All TESC Plans shall meet the requirements of the current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adaptively managed throughout construction based on site inspections and required sampling to maintain compliance with the CSWGP, or WQS when no CSWGP applies. The Contractor shall develop a schedule for implementation of the TESC work and incorporate it into the Contractor's progress schedule.

The Contractor shall submit their TESC Plan (either the adopted plan or new plan) as Type 2 Working Drawings. At the request of the Engineer, updated TESC Plans shall be submitted as Type 1 Working Drawings.

## **8-01.3(1)B** Erosion and Sediment Control (ESC) Lead This section is revised to read:

The Contractor shall identify the ESC Lead at the preconstruction discussions and in the TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate of Training in Construction Site Erosion and Sediment Control from a course approved by the Washington State Department of Ecology. The ESC Lead must be onsite or on call at all times throughout construction. The ESC Lead shall be listed on the Emergency Contact List required under Section 1-05.13(1).

2019 FLASHING YELLOW ARROW SIGNALS PROJECT

1.

The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not limited to:

- 2. Updating the TESC Plan to reflect current field conditions.

3. Discharge sampling and submitting Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology in accordance with the CSWGP.

function. Damaged or inadequate BMPs shall be corrected immediately.

Installing, adaptively managing, and maintaining temporary erosion and

sediment control BMPs to assure continued performance of their intended

 4. Develop and maintain the Site Log Book as defined in the CSWGP. When the Site Log Book or portion thereof is electronically developed, the electronic documentation must be accessible onsite. As a part of the Site Log Book, the Contractor shall develop and maintain a tracking table to show that identified TESC compliance issues are fully resolved within 10 calendar days. The table shall include the date an issue was identified, a description of how it was resolved, and the date the issue was fully resolved.

The ESC Lead shall also inspect all areas disturbed by construction activities, all on-site erosion and sediment control BMPs, and all stormwater discharge points at least once every calendar week and within 24-hours of runoff events in which stormwater discharges from the site. Inspections of temporarily stabilized, inactive sites may be reduced to once every calendar month. The Washington State Department of Ecology's Erosion and Sediment Control Site Inspection Form, located at https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit, shall be completed for each inspection and a copy shall be submitted to the Engineer no later than the end of the next working day following the inspection.

### 8-01.3(1)C Water Management

This section is supplemented with the following new subsections:

# 8-01.3(1)C5 Water Management for In-Water Work Below Ordinary High Water Mark (OHWM)

Work over surface waters of the state (defined in WAC 173-201A-010) or below the OHWM (defined in RCW 90.58.030) shall comply with water quality standards for surface waters of the State of Washington.

## 8-01.3(1)C6 Environmentally Acceptable Hydraulic Fluid

All equipment containing hydraulic fluid that extends from a bridge deck over surface waters of the state or below the OHWM, shall be equipped with a biodegradable hydraulic fluid. The fluid shall achieve either a Pw1 Environmental Persistence Classification stated in ASTM D6046 (≥60% biodegradation in 28 days) or equivalent standard. Alternatively, hydraulic fluid that meets International Organization for Standardization (ISO 15380), the European Union Ecolabel, or equivalent certification will also be accepted.

The Contractor shall submit a Type 1 Working Drawing consisting of a manufacturer catalog cut of the hydraulic fluid used.

The designation of biodegradable hydraulic fluid does not mean fluid spills are acceptable. The Contractor shall respond to spills to land or water in accordance with the Contract, the associated SPCC Plan, and all applicable local, state, and federal regulations.

# 8-01.3(1)C7 Turbidity Curtain

All Work for the turbidity curtain shall be in accordance with the manufacturer's recommendations for the site conditions. Removal procedures shall be developed and used to minimize silt release and disturbance of silt. The Contractor shall submit a Type 2 Working Drawing, detailing product information, installation and removal procedures, equipment and workforce needs, maintenance plans, and emergency repair/replacement plans.

Turbidity curtain materials, installation, and maintenance shall be sufficient to comply with water quality standards.

The Contractor shall notify the Engineer 10 days in advance of removing the turbidity curtain. All components of the turbidity curtain shall be removed from the project.

# 8-01.3(1)C1 Disposal of Dewatering Water

This section is revised to read:

When uncontaminated groundwater is encountered in an excavation on a project it may be infiltrated within vegetated areas of the right of way not designated as Sensitive Areas or incorporated into an existing stormwater conveyance system at a rate that will not cause erosion or flooding in any receiving surface water.

Alternatively, the Contractor may pursue independent disposal and treatment alternatives that do not use the stormwater conveyance system provided it is in compliance with the applicable WACs and permits.

### 8-01.3(1)C2 Process Wastewater

This section is revised to read:

Wastewater generated on-site as a byproduct of a construction process shall not be discharged to surface waters of the State. Some sources of process wastewater may be infiltrated in accordance with the CSWGP. Some sources of process wastewater may be disposed via independent disposal and treatment alternatives in compliance with the applicable WACs and permits.

#### 8-01.3(1)C3 Shaft Drilling Slurry Wastewater

This section is revised to read:

Wastewater generated on-site during shaft drilling activity shall be managed and disposed of in accordance with the requirements below. No shaft drilling slurry wastewater shall be discharged to surface waters of the State. Neither the sediment nor liquid portions of the shaft drilling slurry wastewater shall be contaminated, as detectable by visible or olfactory indication (e.g., chemical sheen or smell).

 Water-only shaft drilling slurry or water slurry with accepted flocculants may be infiltrated on-site. Flocculants used shall meet the requirements of Section 9-14.5(1) or shall be chitosan products listed as General Use Level Designation

(GULD) on the Washington State Department of Ecology's stormwater treatment technologies webpage for construction treatment. Infiltration is permitted if the following requirements are met:

- a. Wastewater shall have a pH of 6.5 8.5 prior to discharge.
- b. The amount of flocculant added to the slurry shall be kept to the minimum needed to adequately settle out solids. The flocculant shall be thoroughly mixed into the slurry.
- c. The slurry removed from the shaft shall be contained in a leak proof cell or tank for a minimum of 3 hours.
- d. The infiltration rate shall be reduced if needed to prevent wastewater from leaving the infiltration location. The infiltration site shall be monitored regularly during infiltration activity. All wastewater discharged to the ground shall fully infiltrate and discharges shall stop before the end of each work day.
- e. Drilling spoils and settled sediments remaining in the containment cell or tank shall be disposed of in accordance with Section 6-19.3(4)F.
- f. Infiltration locations shall be in upland areas at least 150 feet away from surface waters, wells, on-site sewage systems, aquifer sensitive recharge areas, sole source aquifers, well head protection areas, and shall be marked on the plan sheets before the infiltration activity begins.
- g. Prior to infiltration, the Contractor shall submit a Shaft Drilling Slurry Wastewater Management and Infiltration Plan as a Type 2 Working Drawing. This Plan shall be kept on-site, adapted if needed to meet the construction requirements, and updated to reflect what is being done in the field. The Working Drawing shall include, at a minimum, the following information:
  - Plan sheet showing the proposed infiltration location and all surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas within 150 feet.
  - ii. The proposed elevation of soil surface receiving the wastewater for infiltration and the anticipated phreatic surface (i.e., saturated soil).
  - iii. The source of the water used to produce the slurry.
  - iv. The estimated total volume of wastewater to be infiltrated.
  - v. The accepted flocculant to be used (if any).
  - vi. The controls or methods used to prevent surface wastewater runoff from leaving the infiltration location.

19

20

11 12

13

24

25

29

30

31

26 27 28

> 32 33 34

35

36

41

42

43

44 45 46

47

48 49

50 51

- vii. The strategy for removing slurry wastewater from the shaft and containing the slurry wastewater once it has been removed from the shaft.
- viii. The strategy for monitoring infiltration activity and adapting methods to ensure compliance.
- ix. A contingency plan that can be implemented immediately if it becomes evident that the controls in place or methods being used are not adequate.
- The strategy for cleaning up the infiltration location after the infiltration Χ. activity is done. Cleanup shall include stabilizing any loose sediment on the surface within the infiltration area generated as a byproduct of suspended solids in the infiltrated wastewater or soil disturbance associated with BMP placement and removal.
- Shaft drilling mineral slurry, synthetic slurry, or slurry with polymer additives not allowed for infiltration shall be contained and disposed of by the Contractor at an accepted disposal facility in accordance with Section 2-03.3(7)C. Spoils that have come into contact with mineral slurry shall be disposed of in accordance with Section 6-19.3(4)F.

### 8-01.3(1)C4 Management of Off-Site Water

This section is revised to read:

Prior to clearing and grubbing, the Contractor shall intercept all sources of off-site surface water and overland flow that will run-on to the project. Off-site surface water run-on shall be diverted through or around the project in a way that does not introduce construction related pollution. It shall be diverted to its preconstruction discharge location in a manner that does not increase preconstruction flow rate and velocity and protects contiquous properties and waterways from erosion. The Contractor shall submit a Type 2 Working Drawing consisting of the method for performing this Work.

#### 8-01.3(1)E Detention/Retention Pond Construction

This section is revised to read:

Permanent or temporary ponds shall be constructed before beginning other grading and excavation Work in the area that drains into that pond. Detention/retention ponds may be constructed concurrently with grading and excavation when allowed by the Engineer. Temporary conveyances shall be installed concurrently with grading in accordance with the TESC Plan so that newly graded areas drain to the pond as they are exposed.

#### 8-01.3(2) Seeding, Fertilizing, and Mulching This section's title is revised to read:

### 8-01.3(2) Temporary Seeding and Mulching

8-01.3(2)A Preparation for Application

This section is revised to read:

A cleated roller, crawler tractor, or similar equipment, which forms longitudinal depressions at least 2 inches deep shall be used for compaction and preparation of the surface to be seeded. The entire area shall be uniformly covered with longitudinal depressions formed perpendicular to the natural flow of water on the slope. The soil shall be conditioned with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.

#### 8-01.3(2)A1 Seeding

This section is deleted in its entirety.

# 8-01.3(2)A2 Temporary Seeding

This section is deleted in its entirety.

# 8-01.3(2)B Seeding and Fertilizing

This section, including title, is revised to read:

# 8-01.3(2)B Temporary Seeding

Temporary grass seed shall be a commercially prepared mix, made up of low growing grass species that will grow without irrigation at the project location, and accepted by the Engineer. The application rate shall be two pounds per 1000 square feet.

The Contractor shall notify the Engineer not less than 24 hours in advance of any seeding operation and shall not begin the Work until areas prepared or designated for seeding have been accepted. Following the Engineer's acceptance, seeding of the accepted slopes shall begin immediately.

Temporary seeding may be sown at any time allowed by the Engineer. Temporary seeding shall be sown by one of the following methods:

1. A hydro seeder that utilizes water as the carrying agent, and maintains continuous agitation through paddle blades. It shall have an operating capacity sufficient to agitate, suspend, and mix into a homogeneous slurry the specified amount of seed and water or other material. Distribution and discharge lines shall be large enough to prevent stoppage and shall be equipped with a set of hydraulic discharge spray nozzles that will provide a uniform distribution of the slurry.

2. Blower equipment with an adjustable disseminating device capable of maintaining a constant, measured rate of material discharge that will ensure an even distribution of seed at the rates specified.

3. Power-drawn drills or seeders.

 4. Areas in which the above methods are impractical may be seeded by hand methods.

When seeding by hand, the seed shall be incorporated into the top  $\frac{1}{4}$  inch of soil by hand raking or other method that is allowed by the Engineer.

Seed applied using a hydroseeder shall have a tracer added to visibly aid uniform application. This tracer shall not be harmful to plant, aquatic, or animal life. If Short-Term Mulch is used as a tracer, the application rate shall not exceed 250 pounds per acre.

Seed and fertilizer may be applied in one application provided that the fertilizer is placed in the hydroseeder tank no more than 1 hour prior to application.

4 5

# 8-01.3(2)D Mulching

6

This section, including title, is revised to read:

7 8

9

# 8-01.3(2)D Temporary Mulching

Temporary mulch shall be straw, wood strand, or HECP mulch and shall be used for the purpose of erosion control by protecting bare soil surface from particle displacement. Mulch shall not be applied below the anticipated water level of ditch slopes, pond bottoms, and stream banks. HECP mulch shall not be used within the Ordinary High Water Mark, Non-HECP mulches applied below the anticipated water level shall be removed or anchored down so that it cannot move or float, at no additional expense to the Contracting Agency.

15 16 17

Straw or wood strand mulch shall be applied at a rate to achieve at least 95 percent visual blockage of the soil surface.

18 19 20

Short Term Mulch shall be hydraulically applied at the rate of 2500 pounds per acre and may be applied in one lift.

21 22 23

Moderate Term Mulch and Long Term Mulch shall be hydraulically applied at the rate of 3500 pounds per acre with no more than 2000 pounds applied in any single lift.

24 25

Mulch sprayed on signs or sign Structures shall be removed the same day.

26 27

> Areas not accessible by mulching equipment shall be mulched by accepted hand methods.

28 29 30

# 8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch

This section is deleted in its entirety.

32 33 34

31

# 8-01.3(2)G Protection and Care of Seeded Areas

This section is deleted in its entirety.

35 36 37

#### 8-01.3(2)H Inspection

This section is deleted in its entirety.

39 40

38

### 8-01.3(2) | Mowing

41 42 This section is deleted in its entirety.

43 44

# 8-01.3(3) Placing Biodegradable Erosion Control Blanket

45

This section's title is revised to read:

46 47

# 8-01.3(3) Placing Erosion Control Blanket

48 49 The first sentence of the first paragraph is revised to read:

50

51 establishment of vegetation.

52

Erosion Control Blankets are used as an erosion prevention device and to enhance the

The second paragraph is revised to read:

When used to enhance the establishment of seeded areas, seeding and fertilizing shall be done prior to blanket installation.

# **8-01.3(4) Placing Compost Blanket** This section is revised to read:

Compost blankets are used for erosion control. Compost blanket shall be only be placed on ground surfaces that are steeper than 3-foot horizontal and 1-foot vertical though steeper slopes shall be broken by wattles or compost socks placed according to the Standard Plans. Compost shall be placed to a depth of 3 inches over bare soil. An organic tackifier shall be placed over the entire composted area when dry or windy conditions are present or expected. The tackifier shall be applied immediately after the application of

Medium compost shall be used for the compost blanket. Compost may serve the purpose of soil amendment as specified in Section 8-02.3(6).

compost to prevent compost from leaving the composted area.

# 8-01.3(5) Plastic Covering

 The first paragraph is revised to read:

The first paragraph is revised to read:

**Erosion Control** – Plastic coverings used to temporarily cover stockpiled materials, slopes or bare soils shall be installed and maintained in a way that prevents water from intruding under the plastic and prevents the plastic cover from being damaged by wind. Plastic coverings shall be placed with at least a 12-inch overlap of all seams and be a minimum of 6 mils thick. Use soil stabilization and energy dissipation BMPs to minimize the erosive energy flows coming off sloped areas of plastic (e.g., toe of slope). When feasible, prevent the clean runoff from plastic from hitting bare soil. Direct flows from plastic to stabilized outlet areas.

#### 8-01.3(7) Stabilized Construction Entrance

Temporary stabilized construction entrance shall be constructed in accordance with the *Standard Plans*, prior to construction vehicles entering the roadway from locations that generate sediment track out on the roadway. Material used for stabilized construction entrance shall be free of extraneous materials that may cause or contribute to track out.

# **8-01.3(8) Street Cleaning** This section is revised to read:

Self-propelled pickup street sweepers shall be used to remove and collect dirt and other debris from the Roadway. The street sweeper shall effectively collect these materials and prevent them from being washed or blown off the Roadway or into waters of the State. Street sweepers shall not generate fugitive dust and shall be designed and operated in compliance with applicable air quality standards. Material collected by the street sweeper

When allowed by the Engineer, power broom sweepers may be used in non-sensitive areas. The broom sweeper shall sweep dirt and other debris from the roadway into the

shall be disposed of in accordance with Section 2-03.3(7)C.

Compost socks are used to disperse flow and sediment. Compost socks shall be installed as soon as construction will allow but before flow conditions create erosive flows or discharges from the site. Compost socks shall be installed prior to any mulching or compost placement.

# **8-01.3(13) Temporary Curb**

The last two sentences of the second paragraph are revised to read:

Temporary curbs shall be a minimum of 4 inches in height. Temporary curb shall be installed so that ponding does not occur in the adjacent roadway.

# 8-01.3(14) Temporary Pipe Slope Drain

The third and fourth paragraphs are revised to read:

The pipe fittings shall be water tight and the pipe secured to the slope with metal posts, wood stakes, or sand bags.

The water shall be discharged to a stabilized conveyance, sediment trap, stormwater pond, rock splash pad, or vegetated strip, in a manner to prevent erosion and maintain water quality compliance.

The last paragraph is deleted.

# 8-01.3(15) Maintenance

This section is revised to read:

Erosion and sediment control BMPs shall be maintained or adaptively managed as required by the CSWGP until the Engineer determines they are no longer needed. When deficiencies in functional performance are identified, the deficiencies shall be rectified immediately.

The BMPs shall be inspected on the schedule outlined in Section 8-01.3(1)B for damage and sediment deposits. Damage to or undercutting of BMPs shall be repaired immediately.

In areas where the Contractor's activities have compromised the erosion control functions of the existing grasses, the Contractor shall overseed at no additional cost to the Contracting Agency.

The quarry spalls of construction entrances shall be refreshed, replaced, or screened to maintain voids between the spalls for collecting mud and dirt.

Unless otherwise specified, when the depth of accumulated sediment and debris reaches approximately ½ the height of the BMP the deposits shall be removed. Debris or

contaminated sediment shall be disposed of in accordance with Section 2-03.3(7)C. Clean sediments may be stabilized on-site using BMPs as allowed by the Engineer.

#### 8-01.3(16) Removal

This section is revised to read:

The Contractor shall remove all temporary BMPs, all associated hardware and associated accumulated sediment deposition from the project limits prior to Physical Completion unless otherwise allowed by the Engineer. When the temporary BMP materials are made of natural plant fibers unaltered by synthetic materials the Engineer may allow leaving the BMP in place.

The Contractor shall remove BMPs and associated hardware in a way that minimizes soil disturbance. The Contractor shall permanently stabilize all bare and disturbed soil after removal of BMPs. If the installation and use of the erosion control BMPs have compacted or otherwise rendered the soil inhospitable to plant growth, such as construction entrances, the Contractor shall take measures to rehabilitate the soil to facilitate plant growth. This may include, but is not limited to, ripping the soil, incorporating soil amendments, or seeding with the specified seed.

At the request of the Contractor and at the sole discretion of the Engineer the CSWGP may be transferred back to the Contracting Agency. Approval of the Transfer of Coverage request will require the following:

1. All other Work required for Contract Completion has been completed.

 All Work required for compliance with the CSWGP has been completed to the maximum extent possible. This includes removal of BMPs that are no longer needed and the site has undergone all Stabilization identified for meeting the requirements of Final Stabilization in the CSWGP.

3. An Equitable Adjustment change order for the cost of Work that has not been completed by the Contractor.

4. Submittal of the Washington State Department of Ecology Transfer of Coverage form (Ecology form ECY 020-87a) to the Engineer.

If the Engineer approves the transfer of coverage back to the Contracting Agency, the requirement in Section 1-07.5(3) for the Contractor's submittal of the Notice of Termination form to the Washington State Department of Ecology will not apply.

#### 8-01.4 Measurement

This section's content is deleted and replaced with the following new subsections:

# 8-01.4(1) Lump Sum Bid for Project (No Unit Items)

 When the Bid Proposal contains the item "Erosion Control and Water Pollution Prevention" there will be no measurement of unit or force account items for Work defined in Section 8-01 except as described in Sections 8-01.4(3) and 8-01.4(4). Also, except as described in Section 8-01.4(3), all of Sections 8-01.4(2) and 8-01.5(2) are deleted.

2	covered and accepted.
3	
4 5	8-01.4(3) Reinstating Unit Items with Lump Sum Erosion Control and Water Pollution Prevention
6	The Contract Provisions may establish the project as lump sum, in accordance with
7	Section 8-01.4(1) and also include one or more of the items included above in Section 8-
8	01.4(2). When that occurs, the corresponding measurement provision in Section 8-
9	01.4(2) is not deleted and the Work under that item will be measured as specified.
10	
11	8-01.4(4) Items not included with Lump Sum Erosion Control and Water
12	Pollution Prevention
13	Compost blanket will be measured by the square yard by ground slope surface area
14	covered and accepted.
15	
16	Temporary mulch will be measured by the acre by ground slope surface area covered
17	and accepted.
18	
19	High visibility fence will be measured by the linear foot along the ground line of the
20 21	completed fence.
22	8-01.5 Payment
23	This section's content is deleted and replaced with the following new subsections:
23 24	This section's content is deleted and replaced with the following new subsections.
25	8-01.5(1) Lump Sum Bid for Project (No Unit Items)
26	Payment will be made for the following Bid item when it is included in the Proposal:
27	r dyment will be made for the following Bla term when it is moraded in the Frepodal.
28	"Erosion Control and Water Pollution Prevention", lump sum.
29	
30	The lump sum Contract price for "Erosion Control and Water Pollution Prevention"
31	shall be full pay to perform the Work as described in Section 8-01 except for costs
32	compensated by Bid Proposal items inserted through Contract Provisions as
33	described in Section 8-01.4(2). Progress payments for the lump sum item "Erosion
34	Control and Water Pollution Prevention" will be made as follows:
35	A The Ocalisation Association Africance (Challet and all for the National
36	1. The Contracting Agency will pay 15 percent of the bid amount for the initial
37 38	set up for the item. Initial set up includes the following:
39	a. Acceptance of the TESC Plan provided by the Contracting Agency or
40	submittal of a new TESC Plan,
41	out mittal of a new resortian,
42	b. Submittal of a schedule for the installation of the BMPs, and
43	
44	c. Identifying water quality sampling locations.
45	
46	2. 70 percent of the bid amount will be paid in accordance with Section 1-09.9.
47	
48	3. Once the project is physically complete and copies of the all reports
49	submitted to the Washington State Department of Ecology have been
50	submitted to the Engineer, and, if applicable, transference of the CSWGP
51 52	back to the Contracting Agency is complete, the remaining 15 percent of
52	the bid amount shall be paid in accordance with Section 1-09.9.

Compost blanket will be measured by the square yard by ground slope surface area

control erosion and water pollution will be paid by force account in accordance with Section 1-09.6.

To provide a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the Contractor's total Bid.

# 8-01.5(3) Reinstating Unit Items with Lump Sum Erosion Control and Water Pollution Prevention

 The Contract may establish the project as lump sum, in accordance with Section 8-01.4(1) and also reinstate the measurement of one or more of the items described in Section 8-01.4(2), except for Erosion/Water Pollution Control, by force account. When that occurs, the corresponding payment provision in Section 8-01.5(2) is not deleted and the Work under that item will be paid as specified.

# 8-01.5(4) Items not included with Lump Sum Erosion Control and Water Pollution Prevention

 Payment will be made for the following Bid item when it is included in the Proposal:

"High Visibility Fence", per linear foot.

8-02.AP8

# Section 8-02, Roadside Restoration

**April 1, 2019** 

 This section, including all subsections, is revised to read:

# 8-02.1 Description

This Work consists of preserving, maintaining, establishing and augmenting vegetation on the roadsides and within mitigation or sundry site areas. It includes vegetation preservation, weed and pest control, furnishing and placing topsoil, compost, and soil amendments, and furnishing and planting seed, sod and plants of all forms and container types. It includes performing plant establishment activities and soil bioengineering. Work shall be performed in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

Trees, whips, shrubs, ground covers, cuttings, live stakes, live poles, live branches, rhizomes, tubers, rootstock, and seedlings will hereinafter be referred to collectively as "plants" or "plant material". Grass, wildflowers, and other plant materials installed in seed form will hereinafter be referred to collectively as "seed".

#### 8-02.2 Materials

 Materials shall meet the requirements of the following sections:

 Erosion Control and Roadside Planting 9-14 Water 9-25.2

Botanical identification and nomenclature of plant materials shall be based on descriptions by Hitchcock and Cronquist in "Flora of the Pacific Northwest". Botanical identification and nomenclature of plant material not found in "Flora" shall be based on Bailey in "Hortus Third" or superseding editions and amendments or as referenced in the Plans.

#### 8-02.3 Construction Requirements

#### 8-02.3(1) Responsibility During Construction

The Contractor shall prepare, install, and ensure adequate and proper care of all roadside seeded, planted, and lawn areas on the project until all plant establishment periods required by the Contract are complete or until Physical Completion of the project, whichever is last.

Adequate and proper care shall include, but is not limited to, keeping all plant material in a healthy, growing condition by watering, pruning, and other actions deemed necessary for plant health. This Work shall include keeping the project area free from insect infestation, weeds or unwanted vegetation, litter, and other debris along with retaining the finished grades and mulch in a neat uniform condition.

Existing desirable vegetation shall be saved and protected unless removal is required by the Contract or allowed by the Engineer.

The Contractor shall have sole responsibility for the maintenance and appearance of the roadside restoration.

#### 8-02.3(2) Work Plans

Three Work Plan submittals exist under this Section:

- Roadside Work Plan: This plan is required when Work will disturb the roadside beyond 20 feet from the pavement or where trees or native vegetation will be removed, the Contractor shall submit a Type 2 Working Drawing.
- Weed and Pest Control Plan: This plan is required when the proposal contains the item "Weed and Pest Control," and prior to application of any chemicals or weed control activities, the Contractor shall submit a Type 2 Working Drawing.
- 3. Plant Establishment Plan: This plan is required when the proposal contains the item "PSIPE\_\_", and prior to completion of Initial Planting, the Contractor shall submit a Type 2 Working Drawing.

#### 8-02.3(2)A Roadside Work Plan

The Roadside Work Plan shall define the expected impacts to the roadside and restoration resulting from Work necessary to meet all Contract requirements. The Contractor shall define how the roadside restoration Work included in the Contract will be phased and coordinated with project Work such as earthwork, staging, access, erosion and water pollution control, irrigation, etc. The Roadside Work Plan shall include the following:

#### 1. Limiting impacts to roadsides:

- a. Limits of Work including locations of staging or parking.
- b. Means and methods for vegetation protection (in accordance with Section 1-07.16(2)).

- c. Locations outside of clearing limits where vegetation shall be removed to provide access routes or other needs to accomplish the Work.
- d. Plans for removal, preservation and stockpile of topsoil or other native materials, if outside of clearing and grubbing limits and within the project limits.

#### 2. Roadside Restoration:

- a. Plan for propagation and procurement of plants, ground preparation for planting, and installation of plants.
- b. Means and methods to limit soil compaction where seeding and planting are to occur, such as steel plates, hog fuel access roads, wood mats for sensitive areas (including removal) and decompaction for unavoidable impacts.
- c. Plan and timing to incorporate or remove erosion control items.

#### 3. <u>Lawn Installation:</u>

- a. Schedule for lawn installation work.
- b. Establishment and maintenance of lawns.

#### 8-02.3(2)B Weed and Pest Control Plan

The Weed and Pest Control Plan shall describe all weed and pest control needs for the project.

The plan shall be prepared and signed by a licensed Commercial Pest Control Operator or Consultant. The plan for control of weeds and pests on the Contract in accordance with Section 8-02.3(3) shall include the following:

- Names of plan preparer and pesticide operators, including contact information. The Contractor shall furnish the Engineer evidence that all operators are licensed with appropriate endorsements, and that the pesticide used is registered for use by the Washington State Department of Agriculture.
- 2. Means and methods of weed control, including mechanical and/or chemical.
- 3. Schedule for weed control including re-entry times for pesticide application by pesticide type.
- 4. Proposed pesticide use in accordance with Section 8-02.3(3)A: name, application rate, and Safety Data Sheets of all proposed pesticides. Include a copy of the current product label for each pesticide to be used.
- 5. Plan to ensure worker safety until pesticide re-entry periods are met.

#### 8-02.3(2)C Plant Establishment Plan

The Plant Establishment Plan shall describe activities necessary to ensure continued health and vigor of planted and seeded areas in accordance with the requirements of Sections 8-02.3(12) and 8-02.3(13). Should the plan become unworkable at any time during the first-year plant establishment, the Contractor shall submit a revised plan prior to proceeding with further Work. The Plant Establishment Plan shall include:

- 1. Proposed scheduling of joint inspection meetings, activities, materials, equipment to be utilized for the first-year plant establishment.
- 2. Proposed adaptive management activities to ensure successful establishment of seeded, sodded, and planted areas.
- 3. A contact person.
- 4. Management of the irrigation system, when applicable.

#### 8-02.3(3) Weed and Pest Control

The Contractor shall control weed and pest species within the project limits using integrated pest management principles consisting of mechanical, biological, and chemical controls that are outlined in the Weed and Pest Control Plan or as designated by the Engineer. Controlling weeds consists of killing and removing weeds by chemical, mechanical, and hand methods.

#### 8-02.3(3)A Chemical Pesticides

Chemical pesticides include, but are not restricted to, any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest, including but not limited to, insecticides, herbicides, fungicides, adjuvants, and additives, including plant regulators, defoliants and desiccants. The Contractor shall apply chemical pesticides in accordance with the label recommendations, the Washington State Department of Ecology, local sensitive area ordinances, and Washington State Department of Agriculture laws and regulations. Only those pesticides listed in the table Herbicides Approved for Use on WSDOT Rights of Way and accepted as part of the Weed and Pest Control Plan or by written authorization from the Engineer may be used (www.wsdot.wa.gov/maintenance/roadside/herbicide\_use.htm).

The applicator shall be licensed by the State of Washington as a Commercial Applicator or Commercial Operator, with additional endorsements as required by the Special Provisions or the proposed weed control plan. All chemical pesticides shall be delivered to the job site in the original containers, or if premixed off-site, a certification of the components and formulation from the supplier is required. The licensed applicator or operator shall complete WSDOT Form 540-509, Commercial Pesticide Application Record, each day the pesticide is applied and furnish a copy to the Engineer by the following business day.

The Contractor shall ensure confinement of the chemicals within the designated areas. The use of spray chemical pesticides shall require the use of anti-drift

and activating agents and a spray pattern indicator unless otherwise allowed by the Engineer.

The Contractor shall assume all responsibility for rendering any area unsatisfactory for planting by reason of chemical application. Damage to adjacent areas, either on or off the Highway Right of Way, shall be repaired to the satisfaction of the Engineer or the property owner at no additional cost to the Contracting Agency.

#### 8-02.3(3)B Planting and Lawn Area Weed Control

Planting and lawn area weed control consists of controlling weeds and pests in planted and lawn areas shown in the Plans. This Work is included in the bid items for planting and lawn installation.

All planting and lawn areas shall be prepared so that they are weed and debris free at the time of planting and until completion of the project. The planting areas shall include the entire ground surface, regardless of cover, areas around plants, and those areas shown in the Plans.

Within planting or lawn areas, all species that are not shown in the Plans are unwanted and shall be controlled unless specifically allowed by the Engineer to remain.

Grass growing within the mulch ring of a plant, including grass applied in accordance with Sections 8-01.3(2)A1, 8-02.3(9) or 8-02.3(10), shall be considered a weed and shall be controlled on the project in accordance with the weed and pest control plan.

All applications of post-emergent herbicides shall be made while green and growing tissue is present. Residual herbicides shall not be used where rhizomatous species or perennial species are indicated.

Should unwanted vegetation reach the flowering and seed stage in violation of these Specifications, the Contractor shall physically remove and bag the seed heads prior to seed dispersion. All physically removed vegetation and seed heads shall be disposed of off-site at no cost to the Contracting Agency.

#### 8-02.3(3)C Project Area Weed and Pest Control

The Contractor shall control weeds not otherwise covered in accordance with Section 8-02.3(3)B, in all areas within the project limits, including erosion control seeding areas and vegetation preservation areas, as designated by the Engineer.

When the Bid Item "Project Area Weed and Pest Control" is included in the Contract, the Contractor shall also control all weeds specified as noxious by the Washington State Department of Agriculture, the local Weed District, or the County Noxious Weed Control Board outside of planting areas within the project limits.

#### 8-02.3(4) Topsoil

Topsoil shall not be worked or placed when the ground or topsoil is frozen, or excessively wet.

 The Contractor shall protect topsoil stockpiled for project use to prevent erosion and weed growth. Weed growth on topsoil stockpile sites shall be immediately eliminated in accordance with the accepted Weed and Pest Control Plan and Section 8-02.3(3)C.

The subsoil where topsoil is to be placed shall be tilled to a depth of 1 foot or as specified in the Special Provisions or the Plans. Topsoil of the type specified shall be evenly spread over the specified areas to the depth shown in the Plans or as otherwise ordered by the Engineer. Topsoil depths greater than 6 inches shall be placed in lifts no more than 6 inches in depth. The first lift of topsoil shall be incorporated with sub-soil to a depth of 8 inches and subsequent lifts placed and lightly tamped between lifts. After the topsoil has been spread, all large clods, hard lumps, and rocks 2 inches in diameter and larger, and litter shall be raked up, removed, and disposed.

#### 8-02.3(4)A Topsoil Type A

Topsoil Type A shall be as specified in the Special Provisions. The Contractor shall submit a certification by the supplier that the contents of the Topsoil meet the requirements in the Special Provisions.

#### 8-02.3(4)B Topsoil Type B

Topsoil Type B shall be naturally occurring topsoil taken from within the project limits and shall meet the requirements of Section 9-14.1(2). Topsoil Type B shall be taken from areas shown in the Plans to the designated depth and stockpiled at locations that will not interfere with the construction of the project, and outside of sensitive areas, as allowed by the Engineer. A minimum of two weeks prior to excavation of Topsoil Type B, the Contractor shall pre-treat the vegetation on the designated Topsoil Type B areas according to the Weed and Pest Control Plan. Areas beyond the slope stakes shall be disturbed as little as possible in the above operations and under no circumstances shall Topsoil Type B be stockpiled within 10 feet of any existing tree or vegetation area designated to be saved and protected. The Contractor shall protect topsoil stockpile from weed infestation.

The Contractor shall set aside sufficient material to satisfy the needs of the project.

Upon completion of topsoil placement, the Contractor shall dispose of remaining stockpiled Topsoil Type B not required for use on the project at no additional expense to the Contracting Agency in accordance with Section 2-03.3(7)C.

Should a shortage of Topsoil Type B occur, and the Contractor has wasted or otherwise disposed of topsoil material, the Contractor shall furnish Topsoil Type A or C at no additional expense to the Contracting Agency.

# 8-02.3(4)C Topsoil Type C

Topsoil Type C shall be naturally occurring topsoil obtained from a source provided by the Contractor outside of the Contracting Agency-owned Right of Way. Topsoil Type C shall meet the requirements of Sections 8-02.3(4)B and 9-14.1(3). The Contractor shall not begin removal of Topsoil Type C from the proposed source until the material has been allowed for use by the Engineer.

#### 8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation

This Work includes preparing worked areas for the installation of all types of permanent erosion control planting. Work shall be conducted so the flow lines in drainage channels are maintained. Material displaced by the Contractor's operations that interferes with drainage shall be removed from the channel and disposed of as allowed by the Engineer.

#### 8-02.3(5)A Seeding Area Preparation

The Contractor shall prepare roadside seeding areas as follows:

- 1. Remove all excess material, debris, stumps, and rocks greater than 3 inches in diameter from areas to be seeded. Dispose of removed materials offsite.
- 2. Prepare roadside seeding area to a weed free and bare condition.
- 3. Bring area to uniform grade and install topsoil, soil amendments, or compost as specified. Any slopes 3(H) to 1(V) or steeper shall not be tilled unless otherwise specified.
- 4. Compact to provide a reasonably firm but friable seedbed; tractor walk to uniformly cover the surface with longitudinal depressions at least 2 inches deep formed perpendicular to the natural flow of water on the slope. Condition the soil with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.
- 5. Seed and mulch within 2 days of preparation.

#### 8-02.3(5)B Lawn Area Preparation

The Contractor shall prepare lawn areas as follows:

- 1. Prepare lawn area to a weed free and bare condition in accordance with Section 8-02.3(3)B.
- 2. Remove excess material, stumps, wood or rocks over 3 inches in diameter and remove from site.
- 3. Bring area to uniform grade and install topsoil or soil amendments in accordance with Section 8-02.3(4) and 8-02.3(6).
- 4. Till to an 8-inch depth, rake to a smooth even grade without low areas that trap water, and compact with a 50-pound roller. The finished grade of the soil shall be 1 inch below the top of all curbs, junction and valve boxes, walks, driveways, and other Structures.
- 5. Seed or sod the area within two days of preparation.

#### 8-02.3(5)C Planting Area Preparation

The Contractor shall prepare planting areas as follows:

- 1. Prepare planting area to a weed free and bare condition in accordance with Section 8-02.3(3)B.
- 2. Decompact soil to a depth of 18 inches where construction activities have taken place or where native soils are compacted.
- 3. Return soil to uniform grade even with surrounding areas, leaving no holes or mounds over 3 inches in depth or height.
- 4. Remove excess material, stumps, wood or rocks over 3 inches in diameter and remove from site.
- 5. Apply compost or other amendments as indicated in the plans and in accordance with Section 8-02.3(6).
- 6. Cultivate amendments to a depth of 12 inches to provide a reasonably firm but friable planting area. Do not till any slopes 3(H) to 1(V) or steeper.
- 7. Return soil to a uniform finished grade, 1 inch, or the specified depth of mulch plus 1 inch, below walks, curbs, junction and valve boxes, catch basins, and driveways, unless otherwise specified.
- 8. Begin planting and mulching the area within two days of final preparation.

#### 8-02.3(6) Soil Amendments

The Contractor shall place soil amendments of the type, quality, and quantities specified where shown in the Plans or as specified in the Special Provisions. Areas receiving soil amendments shall be bare soil or vegetation free prior to application. All soil amendments shall be installed as shown in the Plans within 30 calendar days after delivery to the project site.

#### 8-02.3(6)A Compost

Compost used for soil amendments shall be Fine Compost unless otherwise designated in the Plans. When compost blanket is used for temporary erosion control, the compost blanket may be incorporated into the soil immediately prior to planting when used as compost soil amendment. The area shall be prepared in accordance with Section 8-02.3(5) prior to placing compost.

#### 8-02.3(6)B Fertilizers

The Contractor shall apply fertilizer in the form, mixture, and rate specified in the Special Provisions or as directed by the Engineer. Application procedures shall be in accordance with the manufacturer's recommendations unless otherwise specified in the Special Provisions.

The Contractor shall submit a guaranteed fertilizer analysis label for the selected product a minimum of one week prior to application for acceptance. Following the Engineer's acceptance, fertilizing of the accepted ground or vegetated surfaces shall begin immediately.

In seeding and lawn areas to be fertilized, the fertilizer shall be applied concurrently with the seed. When fertilizer is hydraulically applied, the fertilizer shall be suitable for application with seeding as specified in Section 8-02.3(9)C. If hydroseeding, the fertilizer shall be placed in the hydroseeder tank no more than 1 hour prior to application.

Fertilizers for planting areas shall be applied concurrently with compost and applied prior to incorporation, unless tablet form fertilizer is specified. Where tablet form fertilizer is specified, fertilizer shall be applied concurrently with plant installation.

Fertilizer sprayed on signs or sign structures shall be removed the same day.

Areas not accessible by fertilizing equipment shall be fertilized by allowed hand methods.

Second Application: A second application of fertilizer shall be applied as specified in the Special Provisions at the locations designated in the Plans. The fertilizer shall be applied during the months of March, April, or May of the following year after the initial seeding, planting, or lawn installation. The fertilizer shall be dry granular pellets or pearls and applied in accordance with the manufacturer's recommendations or as specified in the Special Provisions.

#### 8-02.3(7) Layout of Planting, Lawn and Seeding Areas

The Contractor shall lay out and prepare planting and lawn areas and receive the Engineer's acceptance of layout and preparation prior to any installation activities. The Contractor shall stake the location of all trees larger than 1-inch caliper and the perimeter of all planting areas for acceptance by the Engineer prior to any installation activities.

The Contractor shall locate all trees to be planted in mowable grass areas a minimum of 10 feet from the edge of planting areas, other trees, fence lines, and bottom of ditches unless otherwise specified.

Tree locations shown in the Plans shall be considered approximate unless shown with stationing and offset distance. In irrigated areas, trees shall be located so their trunk is a minimum of  $\frac{1}{3}$  of the spray radius away from the nearest sprinkler head.

Unless otherwise shown, planting areas located adjacent to Roadways shall begin 6 feet from the edge of shoulder on roadway fills and begin 5 feet up on the back slope from the bottom on roadway cut sections. Plants within planting areas shall be located such that mature branching pattern will not block sight distance, signs, or other traffic-related devices. No trees shall be placed where the mature canopy will grow to within 10 feet of existing power lines. Where roadside ditches are present, planting areas shall begin 5 feet from the centerline of the ditch unless shown otherwise in the Plans.

#### 8-02.3(8) Planting

#### 8-02.3(8) A Dates and Conditions for Planting

No plant material shall be planted until it has been inspected and accepted for planting by the Engineer. Rejected material shall be removed from the project site immediately. All plants for the project or a sufficient quantity to plant 1-acre

of the site, whichever is less, shall be received on site prior to the Engineer beginning inspection of the plants.

Under no circumstances will planting be permitted during unsuitable soil or weather conditions as determined by the Engineer. Unsuitable conditions may include frozen soil, freezing weather, saturated soil, standing water, high winds, heavy rains, and high water levels. The ground shall be moist at the time of planting. All planting shall be accomplished during the following periods:

- Non-Irrigated Plant Material
   Western Washington (West of the Cascade Mountain Crest) October
   1 to March 1.
   Eastern Washington (East of the Cascade Mountain Crest) October
   1 to November 15.
- 2. Irrigated Plant Material

In irrigated areas, plant material shall not be installed until the irrigation system is fully operational and accepted by the Engineer. Trees and shrubs may be planted in irrigated areas during the non-irrigated planting window before the irrigation system is functional with the written concurrence of the Engineer only if the irrigation system is guaranteed to be operational prior to the end of the non-irrigated planting window.

#### 8-02.3(8)B Plant Installation

The Contractor shall handle plant material in the following manner:

- 1. Root systems shall be kept covered and damp at all times. Plant material shall be kept in containers until the time of planting.
- Roots shall not be bunched, curled, twisted, or unreasonably bent when placed in the planting hole. Bare root plant material shall be dormant at the time of harvesting and planting. The root systems of all bare root plant material shall be dipped in a slurry immediately prior to planting.
- 3. Plant material supplied in wrapped balls shall not be removed from the wrapping until the time of planting at the planting location. The root system of balled plant material shall be moist at the time of planting. Root balls shall be loosened prior to planting. All burlap, baskets, string, wire and other such materials shall be removed from the hole when planting balled plants.
- 4. Plant cutting material shall be dormant at the time of cutting and planting. All cuttings shall be installed immediately if buds begin to swell.
- 5. Plants shall be placed with the crown at the finished grade. In their final position, plants shall have their top true root (not adventitious root) no more than 1 inch below the soil surface, no matter where that root was located in the original root ball or container. The backfill material,

including container and root ball soil, shall be thoroughly watered on the same day that planting occurs regardless of season.

When installing plants, the Contractor shall dig planting holes three times the diameter of the container or root ball size. Any glazed surface of the planting hole shall be roughened prior to planting.

#### 8-02.3(8)C Pruning, Staking, Guying, and Wrapping

Plants shall be pruned at the time of planting, only to remove minor broken or damaged twigs, branches or roots. Pruning shall be performed with a sharp tool and shall be done in such a manner as to retain or to encourage natural growth characteristics of the plants. All other pruning shall be performed only after the plants have been in the ground at least 1 year and when plants are dormant.

Trees shall only be staked when so noted in the Plans. Each tree shall be staked or guyed before completion of the backfilling in accordance with the details shown in the Plans.

Trees shall be wrapped when so noted in the Plans.

#### 8-02.3(9) Seeding, Fertilizing, and Mulching

For all seed, the Contractor shall furnish the following documentation to the Engineer:

- 1. The state or provincial seed dealer license and endorsements.
- 2. Copies of Washington State Department of Agriculture (WSDA) test results on each lot of seed. Test results shall be within six months prior to the date of application.

#### 8-02.3(9)A Dates for Application of Seed

Unless otherwise allowed by the Engineer, the Contractor shall apply seed for permanent erosion control during the following periods:

Western Washington¹ (West of the Cascade Mountain Crest)	Eastern Washington (East of the Cascade Mountain Crest)
March 1 through May 15	October 1 through November 15
September 1 through October 1	-
<sup>1</sup> Seeding may be allowed outside the	se dates when allowed by the
Engineer.	•

All roadway excavation and embankment ground surfaces that are completed to final grades shall be prepared and seeded during the first available seeding window. When environmental conditions are not conducive to satisfactory results, the Engineer may suspend the seeding Work until such time that the desired results are likely to be obtained. If seeding is suspended, temporary erosion control methods according to Section 8-01 shall be used to protect the bare soil until seeding conditions improve.

#### 8-02.3(9)B Seeding and Fertilizing

The Contractor shall prepare the seeding area in accordance with Section 8-02.3(5)A and apply seed at the rate and mix specified in the Special Provisions. The Contractor shall notify the Engineer within 5 days in advance of any seeding operation and shall not begin the Work until areas prepared or designated for seeding have been accepted. Following the Engineer's acceptance, seeding of the accepted ground surfaces shall begin immediately.

Seeding shall not be done during windy weather or when the ground is frozen, or excessively wet.

When seeding by hand, the seed shall be incorporated into the top 1/4 inch of soil by hand raking or other method that is allowed by the Engineer.

Seed applied as a separate operation using a hydroseeder shall have a tracer added to visibly aid uniform application. The tracer shall be HECP Short-Term Mulch applied at a rate of 200 to 250 pounds per acre and the tracer shall carry the measured specified seeding rate.

#### 8-02.3(9)C Seeding with Fertilizers and Mulches

When the Proposal includes any variation of seeding, fertilizing, and without mulching, the seed and fertilizer shall be applied in one application followed by mulching. West of the Cascade Mountains, seed, fertilizer, and mulch may be completely applied in one application. East of the Cascades, seeding, fertilizing, and mulching shall not be applied as a single application unless allowed by the Engineer in writing prior to application. The fertilizing and mulching shall meet the requirements of Sections 8-02.3(6) and 8-02.3(11).

#### 8-02.3(9)D Inspection

Seeded areas will be inspected upon completion of seeding, fertilizing, and mulching. The Work in any area will not be measured for payment until a uniform distribution of the materials is accomplished at the specified rate. Areas that have not received a uniform application of seed, fertilizer, and mulch at the specified rate, as determined by the Engineer, shall be re-seeded, re-fertilized, or re-mulched prior to payment for seeding within a designated area.

#### 8-02.3(9)E Protection and Care of Seeded Areas

The Contractor shall install and establish a stable and weed free stand of grass as specified within all designated permanent seeding areas. A stable stand of grass shall meet the following requirements:

1. A dense and uniform canopy cover, 70% for Western Washington and 50% for Eastern Washington, of specified species covers all seeded areas after 3 months of active growth following germination during the growing season. Canopy cover is defined as the cover of living and vigorous grass blades, leaves, and shoots of specified species. Volunteer species, weeds, woody plants, or other undesirable vegetation shall not factor into the canopy cover. Growth and establishment may require supplemental irrigation to meet cover requirements.

- Stand health is evident by vigorously growing planted species having a uniform rich-green appearance and with no dead patches or major gaps of growth. A stand of grass that displays rusting, wilting, stunted growth, disease, yellowing or browning of leaves, or bare patches does not meet the stand health requirement.
- The Contractor shall establish a stable stand of grass free of all weeds, non-specified grasses, and other undesirable vegetation. Weed control shall be in accordance with the Weed and Pest Control Plan and occur on a monthly basis during the establishment period and through the life of the Contract.
- 4. Remove all trash, rocks, construction debris, and other obstructions that may be detrimental to the continued establishment of future seeding.

In addition to the requirements of Section 1-07.13(1), restoration of eroded areas including clean up, removal, and proper disposal of eroded material, filling and raking of eroded areas with Topsoil Type A or fine compost, and reapplication of the specified seed, fertilizer, and mulch shall occur at no additional cost to the Contracting Agency.

#### 8-02.3(10) Lawn Installation 8-02.3(10)A Dates and Conditions for Lawn Installation

In irrigated areas, lawn installation shall not begin until the irrigation system is fully operational.

Unless otherwise allowed by the Engineer, seeded lawn installation shall be performed during the following time periods at the location shown:

Western Washington (West of the Cascade Mountain Crest)	Eastern Washington (East of the Cascade Mountain Crest)
March 1 through May 15	October 1 through November 15
September 1 through October 1	
When irrigation system is operational	When irrigation system is operational
March 1 through October 1	March 1 through November 1

#### 8-02.3(10)B Lawn Seeding and Sodding

The Contractor shall prepare the lawn area in accordance with Section 8-02.3(5) and apply seed at the mix and rate of application as specified in the Special Provisions.

The Contractor shall have the option of sodding in lieu of seeding for lawn installation at no additional expense to the Contracting Agency. Seeding in lieu of sodding will not be allowed.

Seed placed by hand shall be raked into the soil. Following raking, the seeded soil shall be rolled with a smooth 50-pound roller. Sod strips shall be placed within 48 hours of being cut. Placement shall be without voids and have the end joints staggered. Following placement, the sod shall be rolled with a smooth roller to establish contact with the soil.

Barriers shall be erected, with warning signs where necessary, to preclude pedestrian traffic access to the newly placed lawn during the establishment period.

#### 8-02.3(10)C Lawn Establishment

Lawn establishment shall consist of caring for all new lawn areas within the limits of the project.

The lawn establishment period shall begin immediately after the lawn seeding or sodding has been accepted by the Engineer and shall extend to the end of four mowings or 20 working days whichever is longer. The mowings shall be done in accordance with Section 8-02.3(10)D.

During the lawn establishment period, the Contractor shall ensure the continuing healthy growth of the turf. This care shall include keeping the project in a presentable condition including, but not limited to, removal of litter, mowing, trimming, removal of grass clippings, edging, fertilization, insecticide and fungicide applications, weed control, watering, repairing the irrigation system, and repair and reseeding all damaged areas.

Temporary barriers shall be removed only when directed by the Engineer.

All Work performed under lawn establishment shall comply with established turf management practices.

Acceptance of lawn planting as specified will be based on a uniform stand of grass and a uniform grade at the time of final inspection. The Contractor shall recultivate, re-grade, reseed, and refertilize areas that are bare or have a poor stand of grass or not having a uniform grade through any cause before final inspection at no additional cost to the Contracting Agency.

#### 8-02.3(10)D Lawn Mowing

Lawn mowing shall begin immediately after the lawn establishment period has been accepted by the Engineer and shall extend to the end of the Contract or the first-year plant establishment, whichever is last.

The Contractor shall accomplish the following minimum requirements:

- 1. Mow, trim, and edge as often as conditions dictate, at a minimum, once per week between April and September. Maximum height of lawn shall not exceed 3 inches. The cutting height shall be 2 inches. Cuttings, trimmings, and edgings shall be disposed of off the project site. When the Engineer allows the use of a mulching mower, trimmings may be left in place.
- Water as often as conditions dictate depending on weather and soil conditions.
- 3. Provide fertilizer, weed control, water, and other measures as necessary to establish and maintain a healthy stand of grass.

#### 8-02.3(11) Mulch

Mulches associated with seeding and planting shall be of the type specified in the Special Provisions or as indicated in the Plans. The Contractor shall evenly apply mulch at the rates indicated in the Plans. Mulches shall not be placed below the anticipated water level of ditch slopes, pond bank slopes, and stream banks, or in areas of standing or flowing water.

#### 8-02.3(11)A Mulch for Seeding Areas

The Contractor shall furnish and evenly apply Hydraulically Applied Erosion Control Product (HECP) Long Term Mulch at the rates indicated and in accordance with the Manufacturer's specifications unless otherwise specified.

HECP Long Term Mulch shall be hydraulically applied at the rate of 3500 pounds per acre with no more than 2000 pounds applied in any single lift. HECP mulch shall not be used within the Ordinary High Water Mark.

Mulch sprayed on signs or sign Structures shall be removed the same day.

Areas not accessible by mulching equipment shall be mulched by accepted hand methods.

HECP Long Term Mulch may be applied with seed and fertilizer west of the summit of the Cascade Range. East of the summit of the Cascade Range, seed and fertilizer shall be applied in a single application followed by the application of mulch.

#### 8-02.3(11)B Bark or Woodchip Mulch

The Contractor shall apply bark or wood chip mulch of the type and depth specified where shown in the Plans or as specified in the Special Provisions.

The Contractor shall complete final grading and placement/incorporation of soil amendments within the planting area prior to placement of mulch. Areas receiving bark mulch shall be bare soil or vegetation free before application, except where trees and other plants are specifically identified in the Plans or designated by the Engineer to be saved and protected.

Bark or wood chip mulch shall be placed to a uniform non-compacted depth of 3 inches over all planting areas unless otherwise specified. Mulch shall be feathered to the base of the plant and 1 inch below the top of junction and valve boxes, curbs, and pavement edges.

Any contamination of the mulch due to the Contractor's operations shall be corrected to its former condition at no additional cost to the Contracting Agency. Mulch placed to a thickness greater than specified shall be at no additional cost to the Contracting Agency.

The Contractor shall keep plant material crowns, runners, and branches free of mulch at all times.

#### 8-02.3(11)C Bark or Woodchip Mulch Rings

The Contractor shall apply mulch rings around plants installed within existing vegetation areas or within seeded areas as shown in the Plans. Bark or wood

chip mulch rings shall be applied to the surface of vegetation free amended soil in the isolated plant locations where shown in the Plans or as specified in the Special Provisions. Bark or wood chip mulch shall be placed to a uniform non-compacted depth of 3 inches to a radius of 2 feet around all plants within interplanted plant locations.

#### 8-02.3(12) Completion of Initial Planting

Upon completion of the initial planting within a designated area, the Engineer will make an inspection of all planting areas. The Engineer will notify the Contractor, in writing, of any replacements or corrective action necessary to meet the plant installation requirements. The Contractor shall replace all plants and associated materials rejected or missing and correct unsatisfactory conditions.

Completion of the initial planting within a designated area includes the following conditions:

- 1. 100 percent of each of the plant material categories are installed as shown in the Plans.
- 2. Planting Area is cleaned up.
- 3. Repairs are completed, including but not limited to, full operation of the irrigation system.
- 4. Mulch coverage is complete.
- 5. All weeds are controlled.

#### 8-02.3(13) Plant Establishment

Plant establishment consists of caring for all plants and planting areas within the project limits. The provisions of Sections 1-07.13(2) and 1-07.13(3) do not apply to this Section.

When the Proposal includes the bid item PSIPE\_\_\_\_\_ (Plant Selection Including Plant Establishment), that bid item includes one year of plant establishment Work. The first year of plant establishment shall begin immediately upon written notification from the Engineer of the completion of initial planting for the project. The first-year plant establishment period shall be a minimum of one calendar year. The one calendar year shall be extended an amount equal to any periods where the Contractor does not comply with the plant establishment requirements and plan.

During the first-year plant establishment period, the Contractor shall perform all Work necessary to ensure the resumption and continued growth of the transplanted material. This Work shall include, but is not limited to, applying water, removing foreign, dead, or rejected plant material, maintaining all planting areas in a weed-free condition, and replacing all unsatisfactory plant material planted under the Contract. If plants are stolen or damaged by the acts of others, the Contracting Agency will pay invoice cost only for the replacement plants with no mark-up and the Contractor will be responsible for the labor to install the replacement plants. Other weed control within the project limits but outside of planting, lawn, or seeding areas shall be as specified in Section 8-02.3(3)C.

During the first year of plant establishment, the Contractor shall meet monthly or at an agreed upon schedule with the Engineer for the purpose of joint inspection of the planting material. The Contractor shall correct all unsatisfactory conditions identified by the Engineer within a 10-day period immediately following the inspection. If plant replacement is required, the Contractor shall, within the 10-day period, submit a plan and schedule for the plant procurement and replacement to occur during the planting period as designated in Section 8-02.3(8). At the end of the plant establishment period, plants that do not show normal growth shall be replaced and all staking and guying that remain on the project shall be removed unless otherwise allowed by the Engineer.

All automatic irrigation systems shall be operated fully automatic during the plant establishment period and until final acceptance of the Contract. Payment for water used to water in plants, or hand watering of plant material or lawn areas unless otherwise specified, is the responsibility of the Contractor during the first-year plant establishment period.

Subsequent year plant establishment periods shall begin immediately at the completion of the preceding year's plant establishment period. Each subsequent plant establishment period shall be one full calendar year in duration.

During the plant establishment period(s) after the first year plant establishment, the Work necessary for the continued healthy and vigorous growth of all plants material shall be performed as directed by the Engineer.

Payment for water used to water plants during the subsequent year(s) of plant establishment will be paid under the plant establishment item.

#### 8-02.3(14) Plant Replacement

The Contractor shall be responsible for growing or arrange to provide sufficient plants for replacement of all plant material rejected through first-year plant establishment. All replacement plant material shall be inspected and accepted by the Engineer prior to installation. All rejected plant material shall be replaced with acceptable plants meeting the specifications and installed according to the requirements of this Section at dates allowed by the Engineer.

All replacement plants shall be of the same species as the plants they replace and meet the requirements of Section 9-14.8 unless otherwise allowed by the Engineer. Plants may vary in size reflecting one season of growth should the Contractor elect to hold plant material under nursery conditions for an additional year to serve as replacement plants. Replacement plant material larger than specified in the Plans shall meet the applicable section requirements of the ASNS for container class, ball size, spread, and branching characteristics.

#### 8-02.3(15) Bioengineering

Bioengineering consists of using plant materials for the purpose of streambank or earthen slope construction and surface stabilization. This Work may include installing woody plant cuttings in various forms as well as part of streambank or earthen slope construction.

#### 8-02.3(15)A Fascines

Live fascines shall be constructed of live and dead cuttings bundled together with a diameter of 8 to 18 inches. Live cuttings shall be the species shown in the Plans. Dead branches may be cuttings from any woody, non-invasive plant native to the project area. Dead branches may be placed within the live fascine and on the side exposed to the air. Live branches shall be placed in contact with the soil along their entire length. Each live fascine must contain a minimum of eight live branches. Dead branches shall constitute no more than 40 percent of the total fascine content.

The total length of each live fascine shall be a minimum of 5 feet. Branches shall be bundled into log-like forms and bound with biodegradable twine spaced at 1-foot intervals along the entire length of the live fascine. Live fascines shall be installed horizontally in a trench whose depth shall be ½ the diameter of the live fascine. Secure the live fascine with live stakes 3 feet in length and ¾ inch in diameter placed at 18-inch intervals. A minimum of three live stakes shall be used per fascine. The live stakes shall be driven through the live fascine vertically into the slope. The ends of live fascines shall be woven together so that no gap remains between the two sections of the live fascine.

Prior to being covered with soil, the fascine shall be thoroughly watered. Once the fascine is covered with 6 inches of soil, the soil covering the fascine shall be thoroughly watered.

When used to remedy erosion areas, live fascines shall extend a minimum of two feet beyond the visible area of erosion and soil disturbance. The locations for live fascines and live stake rows shall be identified in the field for review and acceptance by the Engineer. The Engineer may require adjustment of fascine locations prior to installation in order to best accomplish the intended functions.

Plant replacement during plant establishment for "PSIPE Live Fascine" will be required for any section void of live shoots for a length of 3 feet or more. Replacement shall consist of installing live stakes, spaced 1 foot apart above the fascine within the area void of live shoots. Live stakes shall be of the same species as the live fascine and shall have a minimum length of 3 feet and a minimum diameter of ¾ inch. The requirements of Section 8-02.3(8) apply to PSIPE Live Fascine.

#### 8-02.3(15)B Brush Mattress

Live brush mattress shall be constructed of live branch cuttings, live poles, jute rope and topsoil. The live cuttings and live poles shall be from the plant species designated in the Plans. Live branch cuttings shall be placed with the cut ends oriented down slope as shown in the Plans. Cuttings shall overlap from side to side and from top to bottom as each layer is constructed. The live branches in each succeeding upper layer shall overlap the adjacent lower layer by a minimum of 6 inches. A maximum of 20 percent of the branches may be dead branches, but the live branches shall be distributed evenly to provide even rooting and growth over the entire area of the brush mattress.

The Contractor shall anchor the live brush mattress to the slope using stakes and jute rope as shown in the Plans. Initially, the stakes shall be installed to protrude above the live brush mattress. The Contractor shall attach the jute rope

to the stakes and tighten the rope by tamping the stakes further into the bank, pulling the live brush mattress tight against the soil surface. The Contractor shall cover the live brush mattress with sufficient stockpiled topsoil to ensure good soil contact with the live plant material.

Plant replacement during plant establishment for "PSIPE Live Brush Mattress" will be required for any section void of live shoots for an area of 25 square feet or more. Replacement shall consist of installing live stakes, spaced 3 feet apart in a triangular pattern within the area void of live shoots. Live stakes shall be of the same species as the live brush mattress and shall have a minimum length of 3 feet and a minimum diameter of 3/4 inch. The requirements of Section 8-02.3(8) apply to PSIPE Brush Mattress.

#### 8-02.3(15)C Brush Layer

Brush layers shall be constructed of live branch cuttings, randomly mixed, from the plant species listed under the brush layer heading in the Plans. The number of branches required will vary depending on the average branch diameter and layer thickness.

Brush layers shall be placed in a trench dug at a 45 degree incline into the slope or stream bank. Two-thirds to three-fourths of the length of the live branches shall be buried. Soil shall be firmly tamped in place. Succeeding layers shall be spaced as detailed in the Plans. Brush layer placed in stream banks shall be angled downstream.

Brush layers may include plant establishment when designated as PSIPE Brush Layer. Plant replacement for PSIPE Brush Layer will be required for each section void of live shoots for a continuous distance of 3 feet or more. The requirements of Section 8-02.3(8) apply to PSIPE Brush Layer.

#### 8-02.3(16) Roadside Maintenance Under Construction

When the Contract includes the item, Roadside Maintenance Under Construction, this Work includes roadside mowing and ditch maintenance, and noxious weed control outside of planting areas according to Section 8-02.3(3)C.

#### 8-02.3(16)A Roadside Mowing

The Contractor shall mow designated roadside grass areas to the limits designated by the Engineer. Roadside mowing is limited to slopes not steeper than 3(H) to 1(V).

The Contractor shall mow according to the following requirements:

- 1. Trim around traffic equipment, structures, planting areas, or other features extending above ground preceding or simultaneously with each mowing.
- 2. Maintain grass between 4 and 12 inches in height.
- Operate mowing equipment with suitable guards to prevent throwing rocks or debris onto the traveled way or off of the Contracting Agency property. Power driven equipment shall not cause ruts, deformation, and compaction of the vegetated soil.

Live Pole will be measured per each.

47

48 49

50 51

52

Live Stake Row will be measured by the linear foot along the ground slope line.

satisfactory plants in each category accepted by the Engineer.

The pay quantities for plant materials will be determined by count of the number of

Fascine and PSIPE live fascine will be measured by the linear foot along the ground slope line.

Brush mattress and PSIPE live brush mattress will be measured by the surface square yard along the ground slope line.

Brush layer and PSIPE brush layer will be measured by the linear foot along the ground slope line.

Water will be measured in accordance with Section 2-07.4. Measurement will be made of only that water hauled in tank trucks or similar equipment.

#### 8-02.5 Payment

Payment will be made for each of the following listed Bid items that are included in the Proposal:

"Project Area Weed and Pest Control" will be paid in accordance with Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency entered an amount for "Project Area Weed and Pest Control" in the Proposal to become a part of the total Bid by the Contractor. Payment under this item will be made only when the Work is not already covered by other items.

"Topsoil	Type	", per	acre.

The unit Contract price per acre for "Topsoil Type \_\_\_\_\_" shall be full payment for all costs for the specified Work.

"Fine Compost", per acre or per square yard.

"Medium Compost", per acre or per square yard.

"Coarse Compost", per acre or per square yard.

The unit Contract price per acre for "Fine Compost", "Medium Compost" or "Coarse Compost" shall be full pay for furnishing and spreading the compost onto the existing soil.

"Soil Amendment", per acre.

The unit Contract price per acre for "Soil Amendment" shall be full pay for furnishing and incorporating the soil amendment into the existing soil.

"Plant Selection \_\_\_\_", per each.

The unit Contract price for "Plant Selection \_\_\_\_", per each shall be full pay for all Work to perform the work as specified within the planting area prior to planting for weed control, planting area preparation and installation of plants with initial watering.

As the plants that do not include plant establishment are obtained, propagated, and grown, partial payments will be made as follows:

Payment of 15 percent of the unit Contract price per each when the plant materials have been contracted, propagated, and are growing under nursery conditions. The Contractor shall provide the Engineer with certification that the plant material has been procured or contracted for delivery to the project for planting within the time limits of the project. The certification shall state the location, quantity, and size of all material.

52

"Seeding and Fertilizing", per acre or per square yard.

1	"Seeding and Fertilizing by Hand", per square yard	
2		
3	"Second Application of Fertilizer", per acre.	
4		
5 6	"Seeding and Mulching", per acre.	
7	"Seeded Lawn Installation", per square yard.	
8	"Sod Installation", per square yard.	
9	• • • • • •	
10	"Lawn Mowing", per square yard.	adad Lawa Installation" or "Cad
11	The unit Contract price per square yard for "Se	
12	Installation" shall be full pay for all costs necessary	
	the lawn, erect barriers, control weeds, and estable	9
13	all labor, tools, equipment, and materials neces	
14	specified and shall be paid in the following sequen-	ce for nealtny, vigorous lawn:
15	Ormania Cara of Lavora Disastina	00
16	Completion of Lawn Planting	60 percent of individual areas
17		05 ( 5: 1::1 )
18	Mid Lawn Establishment (after two mowings)	85 percent of individual areas
19		400
20	Completion of Lawn Establishment	100 percent of individual areas
21	(after four mowings)	
22	<u></u>	
23	"Plant Establishment Year" will be paid in acc	
24	For the purpose of providing a common Proposa	
25	Agency entered an amount for "Plant Establishme	nt Year" in the Proposal to
26	become a part of the total Bid by the Contractor.	
27		
28	"Live Pole", per each.	
29		
30	"Live Stake Row", per linear foot.	
31		
32	"Bark or Wood Chip Mulch", per acre.	
33		
34	"Bark or Wood Chip Mulch Rings", per each.	
35	The unit Contract price per acre for "Bark or Wood	
36	furnishing and spreading the mulch onto the existing	ng soil.
37		
38	"Fascine" and "PSIPE Live Fascine", per linear foo	
39	"Brush Mattress" and "PSIPE Live Brush Mattress"	• • • • • • • • • • • • • • • • • • • •
40	"Brush Layer" and "PSIPE Brush Layer", per linear	
11	When PSIPE is included with Fascine, Brush Mattr	ess, or Brush Layer, the payment
12	schedule for PSIPE will apply.	
43		
14	"Roadside Maintenance under Construction" will be	e paid in accordance with Section
45	1-09.6.	
46	For the purpose of providing a common Proposa	
<b>17</b>	Agency has entered an amount for "Roadside Mai	
48	the Proposal to become a part of the total Bid by the	ne Contractor.
19		
50	"Water", per M Gal.	
51		

2	Section 8-04, C April 2, 2018	urbs, Gutters, and Spillways
4 5	8-04.2 Material In the first paragra	sph, the reference to "Portland Cement" is revised to read:
6 7 8	Cement	9-01
9 10 11	\ <i>'</i>	nt Concrete Curbs, Gutters, and Spillways n is supplemented with the following:
12 13 14		ruck apron cement concrete curb and gutter shall be constructed with a crete Class 4000 conforming to the requirements of Section 6-02.
15 16 17	8-06.AP8 Section 8-06, C April 2, 2018	ement Concrete Driveway Entrances
18 19 20	8-06.2 Material In the first paragra	ph, the reference to "Portland Cement" is revised to read:
21 22	Cement	9-01
23 24 25		ction Requirements in is revised to read:
26 27 28 29 30	Class 4000	rete driveway approaches shall be constructed with air entrained concreter conforming to the requirements of Section 6-02 or Portland Cement coraulic Cement Concrete Pavement conforming to the requirements of the requirements
31 32 33	8-07.AP8 Section 8-07, P April 2, 2018	ecast Traffic Curb
34 35 36	8-07.3(1) Install The first sentence	ing Curbs of the first paragraph is revised to read:
37 38 39 40	conforming t	Ill be firmly bedded for its entire length and breadth on a mortar be Section 9-20.4(3) composed of one part Portland cement or blende ent and two parts sand.
41 42	The fourth paragr	ph is revised to read:
43 44 45 46	designated b	een adjacent pieces of curb except joints for expansion and/or drainage a the Engineer shall be filled with mortar composed of one part Portlan nded hydraulic cement and two parts sand.

8-04.AP8

1 2 3	8-09.AP8 Section 8-09, Raised Pavement Markers April 1, 2019
4	8-09.5 Payment
5 6	The last paragraph is revised to read:
7 8 9 10	The unit Contract price per hundred for "Raised Pavement Marker Type 1", "Raised Pavement Marker Type 2", "Raised Pavement Marker Type 3 In.", and "Recessed Pavement Marker" shall be full pay for furnishing and installing the markers in accordance with these Specifications.
12	8-11.AP8
13 14	Section 8-11, Guardrail April 1, 2019
15	8-11.3(1)A Erection of Posts
16 17	The first sentence of the first paragraph is revised to read:
18 19 20	Posts shall be set to the true line and grade of the Highway after the grade is in place and compaction is completed.
21	8-11.3(1)C Terminal and Anchor Installation
22 23	The first paragraph is revised to read:
24 25 26 27	All excavation and backfilling required for installation of anchors shall be performed in accordance with Section 2-09, except that the costs thereof shall be included in the unit Contract price for the anchor installed.
28 29	The first sentence of the second to last paragraph is revised to read:
30 31 32 33	Assembly and installation of Beam Guardrail Non-flared Terminals for Type 31 guardrail shall be supervised at all times by a manufacturer's representative, or an installer who has been trained and certified by the manufacturer.
34 35	The last paragraph is revised to read:
36 37 38	Beam Guardrail Non-flared Terminals for Type 31 guardrail shall meet the crash test and evaluation criteria in the Manual for Assessing Safety Hardware (MASH).
39	8-11.4 Measurement
40 41	The third paragraph is revised to read:
42 43 44	Measurement of beam guardrail terminal will be per each for the completed terminal.
45 46	The fourth paragraph is revised to read:
47 48 49	Measurement of beam guardrail Type 31 buried terminal Type 2 will be per linear foot for the completed terminal.
50	The sixth paragraph is revised to read:

1 2 3 4		beam guardrail anchor Type 10 will be per each for the he attachment of the anchor to the guardrail.	completed				
5 6 7 8	<b>8-11.5 Payment</b> The Bid item "Beam Gu Anchor Type 10", per e	uardrail Anchor Type", per each is revised to read "Bean each.	n Guardrail				
9 10	The Bid item "Beam Gu	uardrail Buried Terminal Type 1", per each is deleted from th	is section.				
11 12	The Bid item "Beam of paragraph are revised"	Guardrail Buried Terminal Type 2", per linear foot and the to read:	e following				
13 14	"Beam Guardrail T	ype 31 Buried Terminal Type 2", per linear foot.					
15 16 17 18 19	2" shall be full payr	The unit Contract price per linear foot for "Beam Guardrail Type 31 Buried Terminal Type 2" shall be full payment for all costs to obtain and provide materials and perform the Work as described in Section 8-11.3(1)C.					
20 21 22	8-14.AP8 Section 8-14, Cemer April 2, 2018	nt Concrete Sidewalks					
23 24 25	<b>8-14.2 Materials</b> In the first paragraph, t	he reference to "Portland Cement" is revised to read:					
26 27	Cement	9-01					
28 29 30	In the second paragraph, each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".						
31 32 33	8-16.AP8 Section 8-16, Concr April 2, 2018	rete Slope Protection					
34 35 36	8-16.2 Materials In the first paragraph, t	he last two material references are revised to read:					
37 38 39 40 41	Poured Portla Concrete Slope Pr Pneumatically Hydraulic Cement	<b>.</b>	Cement Blended				
42 43 44	8-17.AP8 Section 8-17, Impac January 7, 2019	t Attenuator Systems					
45 46 47	<b>8-17.3 Construction</b> This section is supplem	n Requirements nented with the following:					

1 2 3	Manual for Assessing Safety Hardware (MASH), except as otherwise noted in the Plans or Special Provisions.
4 5 6 7 8	8-20.AP8 Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical August 6, 2018
9 10	8-20.1(1) Regulations and Code The last paragraph is revised to read:
11 12 13 14 15 16 17	Persons performing electrical Work shall be certified in accordance with and supervised as required by RCW 19.28.161. Proof of certification shall be worn at all times in accordance with WAC 296-46B-942. Persons failing to meet these certification requirements may not perform any electrical work, and shall stop any active electrical work, until their certification is provided and worn in accordance with this Section.
18 19	8-20.2(2) Equipment List and Drawings This section is renumbered:
20 21 22	8-20.2(1) Equipment List and Drawings
23 24 25	<b>8-20.3(4) Foundations</b> The second sentence of the first paragraph is revised to read:
26 27 28	Concrete for Type II, III, IV, V, and CCTV signal standards and light standard foundations shall be Class 4000P and does not require air entrainment.
29 30 31	8-20.3(5)A General The last two sentences of the last paragraph is deleted.
32 33	This section is supplemented with the following:
34 35 36 37	All conduits shall include a pull tape with the equipment grounding conductor. The pull tape shall be attached to the conduit near the end bell or grounded end bushing, or to duct plugs or caps if present, at both ends of the conduit.
38 39	<b>8-20.3(8) Wiring</b> The seventeenth paragraph is supplemented with the following:
40 41 42 43	Pulling tape shall meet the requirements of Section 9-29.1(10). Pull string may not be used.
44 45	8-20.3(14)C Induction Loop Vehicle Detectors Item number 2 is deleted.
46 47 48	Item numbers 3 through 12 are renumbered to 2 through 11, respectively.

1 2 3	8-21.AP8 Section 8-21, Permanent Signing January 7 2019
4 5	8-21.3(5) Sign Relocation The second sentence of the first paragraph is revised to read:
6 7 8 9 10	Where the existing sign Structure is mounted on concrete pedestals, the Contractor shall remove the pedestal to a minimum of 2 feet below finished grade and backfill the remaining hole with material similar to that surrounding the hole.
11	8-21.3(9)F Foundations
12 13	Item number 3 of the twelfth paragraph is supplemented with the following new sentence:
14 15	Class 4000P concrete for roadside sign structures does not require air entrainment.
16	8-22.AP8
17 18	Section 8-22, Pavement Marking January 7, 2019
19 20 21	8-22.3(2) Preparation of Roadway Surfaces The second paragraph is revised to read:
22 23 24	Remove all other contaminants from pavement surfaces that may adversely affect the installation of new pavement marking.
25 26 27	8-22.3(3)F Application Thickness The second to last sentence of the last paragraph is revised to read:
28 29	After grinding, clean the groove.
30	9-00.AP9
31 32	Section 9-00, Definitions and Tests January 7, 2019
33	9-00.4 Sieves for Testing Purposes
34 35	This section is revised to read:
36 37 38	Test sieves shall be made of either: (1) woven wire cloth conforming to ASTM E11, or (2) square-hole, perforated plates conforming to ASTM E323.
39	9-00.7 Galvanized Hardware, AASHTO M 232
40 41	The first sentence is revised to read:
42 43 44	An acceptable alternate to hot-dip galvanizing in accordance with AASHTO M 232 will be zinc coatings mechanically deposited in accordance with ASTM B695, providing the minimum thickness of zinc coating is not less than that specified in AASHTO M 232, and

the process will not produce hydrogen embrittlement in the base metal.

#### 9-02.1 Asphalt Material, General

The second paragraph is revised to read:

The Asphalt Supplier of Performance Graded (PG) asphalt binder and emulsified asphalt shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 2 "Standard Practice for Asphalt Suppliers That Certify Performance Graded and Emulsified Asphalts". The Asphalt Supplier's QCP shall be submitted and receive the acceptance of the WSDOT State Materials Laboratory. Once accepted, any change to the QCP will require a new QCP to be submitted for acceptance. The Asphalt Supplier of PG asphalt binder and emulsified asphalt shall certify through the Bill of Lading that the PG asphalt binder or emulsified asphalt meets the Specification requirements of the Contract.

#### 9-02.1(4) Performance Graded Asphalt Binder (PGAB)

This section's title is revised to read:

### Performance Graded (PG) Asphalt Binder

The first paragraph is revised to read:

 PG asphalt binder meeting the requirements of AASHTO M 332 Table 1 of the grades specified in the Contract shall be used in the production of HMA. For HMA with greater than 20 percent RAP by total weight of HMA, or any amount of RAS, the new asphalt binder, recycling agent and recovered asphalt (RAP and/or RAS) when blended in the proportions of the mix design shall meet the PG asphalt binder requirements of AASHTO M 332 Table 1 for the grade of asphalt binder specified by the Contract.

The second paragraph, including the table, is revised to read:

In addition to AASHTO M 332 Table 1 specification requirements, PG asphalt binders shall meet the following requirements:

33
34

		Additional Requirements by Performance Grade (PG) Asphalt Binders					
Property	Test Method	PG58S- 22	PG58H- 22	PG58V- 22	PG64S-28	PG64H- 28	PG64V- 28
RTFO Residue: Average Percent Recovery @ 3.2 kPa	AASHTO T 3501			30% Min.	20% Min.	25% Min.	30% Min.
<sup>1</sup> Specimen	conditioned	in accordance	ce with AASH	HTO T 240 –	RTFO.		

The third paragraph is revised to read:

The RTFO J<sub>nrdiff</sub> and the PAV direct tension specifications of AASHTO M 332 are not required.

1	
2	
3	9-02.1(6) Cationic Emulsified Asphalt
4 5	This section is revised to read:
6	Cationic Emulsified Asphalt meeting the requirements of AASHTO M 208 Table 1 of the
7	grades specified in the Contract shall be used.
8 9	9-02.5 Warm Mix Asphalt (WMA) Additive
10	This section, including title, is revised to read:
11	This section, melating title, is revised to read.
12	9-02.5 HMA Additive
13	Additives for HMA shall be accepted by the Engineer.
14 15	9-03.AP9
16	Section 9-03, Aggregates
17	January 7, 2019
40	0.00 4. Annua nata a fan Bartland Oansant Oansant
18 19	9-03.1 Aggregates for Portland Cement Concrete This section's title is revised to read:
20	This section's title is revised to read.
21	Aggregates for Concrete
22	
23	9-03.1(1) General Requirements
24 25	The first two sentences of the first paragraph are revised to read:
26	Concrete aggregates shall be manufactured from ledge rock, talus, or sand and gravel in
27	accordance with the provisions of Section 3-01. Reclaimed aggregate may be used if it
28	complies with the specifications for concrete.
29 30	The second paragraph (up until the colon) is revised to read:
31	The decenta paragraph (ap antil the colon) is review to read.
32	Aggregates for concrete shall meet the following test requirements:
33	The second contents of the second to lost negatively is revised to used.
34 35	The second sentence of the second to last paragraph is revised to read:
36	The Contractor shall submit test results according to ASTM C1567 through the Engineer
37	to the State Materials Laboratory that demonstrate that the proposed fly ash when used
38	with the proposed aggregates and cement will control the potential expansion to 0.20
39 40	percent or less before the fly ash and aggregate sources may be used in concrete.
41	9-03.1(2) Fine Aggregate for Portland Cement Concrete
42	This section's title is revised to read:
43	
44	Fine Aggregate for Concrete

Fine Aggregate for Concrete

# 9-03.1(4) Coarse Aggregate for Portland Cement Concrete

This section's title is revised to read:

45

46

47 48

49 50

# **Coarse Aggregate for Concrete**

#### 9-03.1(4)C Grading

The first paragraph (up until the colon) is revised to read:

3 4 5

1

2

Coarse aggregate for concrete when separated by means of laboratory sieves shall conform to one or more of the following gradings as called for elsewhere in these Specifications, Special Provisions, or in the Plans:

6 7 8

#### 9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete

This section's title is revised to read:

9

#### **Combined Aggregate Gradation for Concrete**

11 12

#### 9-03.1(5)B Grading

13 14 15

In the last paragraph, "WSDOT FOP for WAQTC/AASHTO T 27/T 11" is revised to read "FOP for WAQTC/AASHTO T 27/T 11".

16 17

# 9-03.2 Aggregate for Job-Mixed Portland Cement Mortar

This section's title is revised to read:

19 20

18

# Aggregate for Job-Mixed Portland Cement or Blended Hydraulic Cement Mortar

21 22 23

The first sentence of the first paragraph is revised to read:

The first paragraph (up until the colon) is revised to read:

242526

Fine aggregate for portland cement or blended hydraulic cement mortar shall consist of sand or other inert materials, or combinations thereof, accepted by the Engineer, having hard, strong, durable particles free from adherent coating.

27 28 29

#### 9-03.4(1) General Requirements

30 31 32

33

Aggregate for bituminous surface treatment shall be manufactured from ledge rock, talus, or gravel, in accordance with Section 3-01. Aggregates for Bituminous Surface Treatment shall meet the following test requirements:

34 35

# 9-03.8(1) General Requirements

36 37

The first paragraph (up until the colon) is revised to read:

38 39 40

Aggregates for Hot Mix Asphalt shall meet the following test requirements:

40 41

#### 9-03.8(2) HMA Test Requirements

The two tables in the second paragraph are replaced with the following three tables:

4	2
4	3

	HMA Class							
Mix Criteria	3% inch		½ inch		3/4 inch		1 inch	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Voids in Mineral	15.0		14.0		13.0		12.0	
Aggregate (VMA), %								
voids Filled With Asphal	Voids Filled With Asphalt (VFA), %							
ESAL's (millions)	VFA							
< 0.3	70	80	70	80	70	80	67	80

0.3 to < 3	65	78	65	78	65	78	65	78
≥ 3	73	76	65	75	65	75	65	75
Dust/Asphalt Ratio	0.6	1.6	0.6	1.6	0.6	1.6	0.6	1.6

**Test Method** ESAL's (millions) **Number of Passes** Hamburg Wheel-Track Testing, FOP for < 0.3 10,000 AASHTO T 324 Minimum Number of 0.3 to < 312,500 Passes with no Stripping Inflection Point and Maximum Rut Depth of ≥ 3 15,000 10mm Indirect Tensile (IDT) Strength (psi) of Bituminous Materials FOP for ASTM 175 Maximum

	ESAL's (millions)	N initial	N design	N maximum
	< 0.3	≤ 91.5	96.0	≤ 98.0
% Gmm	0.3 to < 3	≤ 90.5	96.0	≤ 98.0
	≥ 3	≤ 89.0	96.0	≤ 98.0
Curatary Compaction	< 0.3	6	50	75
Gyratory Compaction (number of gyrations)	0.3 to < 3	7	75	115
(number of gyrations)	> 3	8	100	160

#### 9-03.8(7) HMA Tolerances and Adjustments

In the table in item number 1, the fifth row is revised to read:

Asphalt binder   -0.4% to 0.5%   ±0.7%	
----------------------------------------	--

In the table in item number 1, the following new row is inserted before the last row:

Voids in Mineral	-1.0%	
Aggregate, VMA		

#### 9-03.9(1) Ballast

The second paragraph (up until the colon) is revised to read:

Aggregates for ballast shall meet the following test requirements:

#### 9-03.14(4) Gravel Borrow for Structural Earth Wall

The second sentence of the first paragraph is revised to read:

The material shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, concrete rubble, or asphaltic concrete rubble.

#### 9-03.21(1)B Recycled Concrete Aggregate Approval and Acceptance

The first sentence of the second paragraph is revised to read:

Recycled concrete aggregate may be used as coarse aggregate or blended with coarse aggregate for Commercial Concrete, Class 3000 concrete, or Cement Concrete Pavement.

Item number 4 of the second paragraph is revised to read:

2

1

3 4 5

6

7 8 9

16

17

10 11

18 19 20

22 23 24

21

26 27 28

25

4. For Cement Concrete Pavement mix designs using recycled concrete aggregates, the Contractor shall submit evidence that ASR mitigating measures control expansion in accordance with Section 9-03.1(1).

This section is supplemented with the following new subsection:

#### 9-03.21(1)B1 Recycled Concrete Aggregate Approval and Acceptance

Recycled concrete aggregate may be approved through a three tiered system that consists of the following:

	Tier 1
Approval Requirements	Approval of the Reclamation Facility is not required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with
	Section 9-03.21(1).
	Field acceptance testing in accordance with Section 3-
	04.
Approved to provid	e the following Aggregate Materials:
9-03.10 Aggregate for Gravel Base	
9-03.12(1)B Gravel Backfill for Founda	tions Class B
9-03.12(2) Gravel Backfill for Walls	
9-03.12(3) Gravel Backfill for Pipe Zon	e Bedding
9-03.14(1) Gravel Borrow	
9-03.14(2) Select Borrow	
9-03.14(2) Select Borrow (greater than	3 feet below subgrade and side slope)
9-03.14(3) Common Borrow	
9-03.14(3) Common Borrow (greater the	nan 3 feet below subgrade and side slope)
9-03.17 Foundation Material Class A a	nd Class B
9-03.18 Foundation Material Class C	
9-03.19 Bank Run Gravel for Trench B	ackfill

	Tier 2
Approval Requirements	The Reclamation Facility shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 9 "Standard Practice for Approval of Reclamation Facilities of WSDOT Recycled Concrete and Returned Concrete". The Reclamation Facility's QCP shall be submitted and approved by the WSDOT State Materials Laboratory. Once accepted, any changes to the QCP will require a new QCP to be submitted for acceptance. Evaluation of aggregate source properties (LA Wear and Degradation) for the recycled concrete aggregate is not required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1), required if requested. Field acceptance testing in accordance with Section 3-04 is required. Provide certification in accordance with WSDOT QC 9 for every lot. A lot shall be no larger than 10,000 tons.
Approved to provid	le the following Aggregate Materials:
Tier 1 aggregate materials	
9-03.1 Coarse Aggregate for Commercial	cial Concrete or Concrete class 3000

9-03.9(3) Crushed Surfacing

9-03.12(1)A Gravel Backfill for Foundations Class A

	Tier 3	
Approval Requirements	The Reclamation Facility shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 10 "Standard Practice for Approval of Reclamation Facilities of Recycled Concrete Aggregates from Stockpiles of Unknown Sources". The Reclamation Facility's QCP shall be submitted and approved by the WSDOT State Materials Laboratory. Once accepted, any changes to the QCP will require a new QCP to be submitted for acceptance.  Evaluation of aggregate source properties (LA Wear and Degradation) for the recycled concrete aggregate is required.	
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1) is required. Field acceptance testing in accordance with Section 3-04 is required. Provide certification in accordance with WSDOT QC 10	
Approved to provid	for every lot. A lot shall be no larger than 10,000 tons  e the following Aggregate Materials:	
Tier 1 aggregate materials	o the fenerally regardance materials.	
9-03.1 Coarse Aggregate for Commerc	cial Concrete or Concrete class 3000	
9-03.9(1) Ballast		
9-03.9(2) Permeable Ballast		
9-03.9(3) Crushed Surfacing		
9-03.12(1)A Gravel Backfill for Founda	tions Class A	

For Reclamation Facilities that do not participate in Tier 2 and Tier 3, approval of recycled concrete aggregate will be in accordance with Section 9-03.21(1), and acceptance will be in accordance with Section 3-04.

# 9-03.21(1)E Table on Maximum Allowable percent (By Weight) of Recycled Material

"Portland Cement" is deleted from the first two rows in the table.

The following new row is inserted after the second row:

Coarse Aggregate for Concrete Pavement	9-03.1(4)	0	100	0	0

The first column of the fourth row (after the preceding Amendment is applied) is revised to read:

Coarse Aggregate for Commercial Concrete and Class 3000 Concrete

2

4

5

6 7

8

9

10 11

12

1

1 2 3	9-04.AP9 Section 9-04, Joint and Crack Sealing Materials January 7, 2019
4 5	This section's title is revised to read:
6 7	Joint Sealing Materials
8 9 10	<b>9-04.1(2) Premolded Joint Filler for Expansion Joints</b> In this section, each reference to "AASHTO T 42" is revised to read "ASTM D 545".
11 12 13	9-04.2(1)A1 Hot Poured Sealant for Cement Concrete Pavement This section is supplemented with the following:
14 15 16	Hot poured sealant for cement concrete pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.
17 18 19	9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement This section is supplemented with the following:
20 21 22	Hot poured sealant for bituminous pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.
23 24 25	9-04.2(1)B Sand Slurry for Bituminous Pavement Item number 2 of the first paragraph is revised to read:
26 27	2. Two percent portland cement or blended hydraulic cement, and
28	9-04.3 Joint Mortar
29 30	The first paragraph is revised to read:
31 32 33	Mortar for hand mortared joints shall conform to Section 9-20.4(3) and consist of one part portland cement or blended hydraulic cement, three parts fine sand, and sufficient water to allow proper workability.
34	
35 36 37	<b>9-04.5 Flexible Plastic Gaskets</b> In the table, the Test Method value for <b>Specific Gravity at 77°F</b> is revised to read "ASTM D71".
38 39 40	In the table, the Test Method value for <b>Flash Point COC</b> , <b>F</b> is revised to read "ASTM D93 REV A".
41 42	In the table, the Test Method value for <b>Volatile Matter</b> is revised to read "ASTM D6".
43 44 45 46	9-05.AP9 Section 9-05, Drainage Structures and Culverts January 7, 2019
47 48	9-05.3(1)A End Design and Joints The second sentence of the first paragraph is revised to read:

1 2	The joints and gasket material shall meet the requirements of ASTM C990.
3	9-05.3(1)C Age at Shipment
4	The last sentence of the first paragraph is revised to read:
5 6 7 8 9	Unless it is tested and accepted at an earlier age, it shall not be considered ready for shipment sooner than 28 days after manufacture when made with Type II portland cement or blended hydraulic cement, nor sooner than 7 days when made with Type III portland cement.
11	9-05.7(3) Concrete Storm Sewer Pipe Joints
12	The second sentence is revised to read:
13 14 15	The joints and gasket material shall meet the requirements of ASTM C990.
16 17	9-05.7(4)A Hydrostatic Pressure on Pipes in Straight Alignment The first sentence is revised to read:
18 19 20 21 22 23	Hydrostatic pressure tests on pipes in straight alignment shall be made in accordance with the procedure outlined in Section 10 of ASTM C990, except that they shall be performed on an assembly consisting of not less than three nor more than five pipe sections selected from stock by the Engineer and assembled in accordance with standard installation instructions issued by the manufacturer.
24 25	9-05.24(1) Polypropylene Culvert Pipe and Storm Sewer Pipe
26	This section is revised to read:
27 28 29	Polypropylene culvert and storm sewer pipe shall conform to the following requirements:
30 31	<ol> <li>For dual wall pipe sizes up to 60 inches: ASTM F2881 or AASHTO M 330, Type S or Type D.</li> </ol>
32 33 34	2. For double or triple wall pipe sizes up to 60 inches: ASTM F2764.
35 36	3. Fittings shall be factory welded, injection molded, or PVC.
37 38 39	9-05.24(2) Polypropylene Sanitary Sewer Pipe This section is revised to read:
40 41	Polypropylene sanitary sewer pipe shall conform to the following requirements:
42 43	1. For pipe sizes up to 60 inches: ASTM F2764.
44 45	2. Fittings shall be factory welded, injection molded, or PVC.
46 47 48	9-06.AP9 Section 9-06, Structural Steel and Related Materials January 7, 2019
49 50 51	9-06.5 Bolts This section's title is revised to read:

#### **Bolts and Rods**

#### 

#### 9-06.5(4) Anchor Bolts

This section, including title, is revised to read:

#### 9-06.5(4) Anchor Bolts and Anchor Rods

Anchor bolts and anchor rods shall meet the requirements of ASTM F1554 and, unless otherwise specified, shall be Grade 105 and shall conform to Supplemental Requirements S2, S3, and S4.

Nuts for ASTM F1554 Grade 105 black anchor bolts and anchor rods shall conform to ASTM A563, Grade D or DH. Nuts for ASTM F1554 Grade 105 galvanized anchor bolts and anchor rods shall conform to either ASTM A563, Grade DH, or AASHTO M292, Grade 2H, and shall conform to the overtapping, lubrication, and rotational testing requirements in Section 9-06.5(3). Nuts for ASTM F1554 Grade 36 or 55 black or galvanized anchor bolts and anchor rods shall conform to ASTM A563, Grade A or DH. Washers shall conform to ASTM F436.

The bolts and rods shall be tested by the manufacturer in accordance with the requirements of the pertinent Specification and as specified in these Specifications. Anchor bolts, anchor rods, nuts, and washers shall be inspected prior to shipping to the project site. The Contractor shall submit to the Engineer for acceptance a Manufacturer's Certificate of Compliance for the anchor bolts, anchor rods, nuts, and washers, as defined in Section 1-06.3. If the Engineer deems it appropriate, the Contractor shall provide a sample of the anchor bolt, anchor rod, nut, and washer for testing.

All bolts, rods, nuts, and washers shall be marked and identified as required in the pertinent Specification.

#### 9-06.15 Welded Shear Connectors

The third paragraph is revised to read:

Mechanical properties shall be determined in accordance with AASHTO T 244.

#### 9-06.17 Vacant

This section, including title, is revised to read:

#### 9-06.17 Noise Barrier Wall Access Door

Access door frames shall be formed of 14-gauge steel to the size and dimensions shown in the Plans. The access door frame head and jamb members shall be mitered, securely welded, and ground smooth. Each head shall have two anchors and each jamb shall have three anchors. The hinges shall be reinforced with  $\frac{1}{4}$ -inch by 12-inch plate, width equal to the full inside width of the frame.

Access doors shall be full flush 1-¾-inch thick seamless doors with a polystyrene core. Door faces shall be constructed with smooth seamless 14-gauge roller-levered, cold-rolled steel sheet conforming to ASTM A 792 Type SS, Grade 33 minimum, Coating Designation AZ55 minimum. The vertical edges shall be neat interlocked hemmed edge seam. The top and bottom of the door shall be enclosed with 14-gauge channels. Mortise and reinforcement for locks and hinges shall be 10-gauge steel. Welded top cap shall be ground and filled for exterior applications. The bottom channel shall have weep holes.

Each access door shall have three hinges. Access door hinges shall be ASTM A 276 Type 316 stainless steel, 4-1/2-inches square, with stainless steel ball bearing and non-removable pins.

Each access door shall have two pull plates. The pull plates shall be ASTM A 240 Type 316 stainless steel, with a grip handle of one-inch diameter and 8 to 10-inches in length.

The door assembly shall be fabricated and assembled as a complete unit including all hardware specified prior to shipment.

#### 9-06.18 Metal Bridge Railing

The second sentence of the first paragraph is revised to read:

Steel used for metal railings, when galvanized after fabrication in accordance with AASHTO M111, shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

9-07.AP9

Section 9-07, Reinforcing Steel January 7, 2019

#### 9-07.5(1) Epoxy-Coated Dowel Bars (for Cement Concrete Rehabilitation)

This section (including title) is revised to read:

#### 9-07.5(1) Dowel Bars for Cement Concrete Pavement Rehabilitation

Dowel bars for Cement Concrete Pavement Rehabilitation shall be 1½ inch outside diameter plain round steel bars or tubular bars 18 inches in length and meet the requirements of one of the following dowel bar types:

- 1. Epoxy-coated dowel bars shall be round plain steel bars of the dimensions shown in the Standard Plans. They shall conform to AASHTO M31, Grade 60 or ASTM A615, Grade 60 and shall be coated in accordance with ASTM A1078 Type 2 coating, except that the bars may be cut to length after being coated. Cut ends shall be coated in accordance with ASTM A1078 with a patching material that is compatible with the coating, inert in concrete and recommended by the coating manufacturer. The thickness of the epoxy coating shall be 10 mils plus or minus 2 mils. The Contractor shall furnish a written certification that properly identifies the coating material, the number of each batch of coating material used, quantity represented, date of manufacture, name and address of manufacturer, and a statement that the supplied coating material meets the requirements of ASTM A1078 Type 2 coating. Patching material, compatible with the coating material and inert in concrete and recommended by the manufacturer shall be supplied with each shipment for field repairs by the Contractor.
- 2. ASTM A513 steel tubes made from Grade 60 Carbon Steel Tube with a 1.625 inch outside diameter and a 0.120 inch wall thickness. Both the inside and outside of the tube shall be zinc coated with G40 galvanizing in accordance with ASTM A653. Following zinc coating the tubes shall be coated in accordance with Section 9-07.5(1) item 1. The ends of the tube shall be capped to prevent intrusion of concrete or other materials.

### 9-07.5(2) Corrosion Resistant Dowel Bars (for Cement Concrete Pavement and Cement Concrete Pavement Rehabilitation)

The first paragraph (up until the colon) is revised to read:

4 5 6

1

2

3

Corrosion resistant dowel bars shall be 11/2 inch outside diameter plain round steel bars or tubular bars 18 inches in length and meet the requirements of one of the following:

7 8

Item number 4 and 5 of the first paragraph are revised to read:

9 10

11

12

15 16

17 18

19

4. Corrosion-resistant, low-carbon, chromium plain steel bars for concrete reinforcement meeting all the requirements of ASTM A 1035 Alloy Type CS Grade 100 or Alloy Type CS Grade 120.

13 14

Zinc Clad dowel bars shall be 1½ inch solid bars or 1.625 inch outside diameter by 0.120 inch wall tubular bars meeting the chemical and physical properties of AASHTO M 31, Grade 60, or AASHTO M 255, Grade 60. The bars shall have a minimum of 0.035 inches A710 Zinc alloy clad to the plain steel inner bar or tube. A710 Zinc shall be composed of: zinc: 99.5 percent, by weight, minimum; copper: 0.1-0.25 percent, by weight; and iron: 0.0020 percent, by weight, maximum. Each end of tubular bars shall be plugged using a snug-fitting insert to prohibit any intrusion of concrete or other materials.

20 21 22

23

The numbered list in the first paragraph is supplemented with the following:

24 25 26

Multicoated fusion bonded epoxy bars shall consist of an ASTM A615 bar with alternating layers of ASTM A934 coating and an abrasion resistant overcoat (ARO). The ASTM A934 coating shall form the base and there shall be two layers of each coating material. The minimum thickness of the combined layers of the ASTM A934 coating and ARO coating shall be 20 mils. The ARO shall meet the following requirements:

27

Test	Method	Specification
Gouge Resistance	NACE TM0215, 30 kg wt., LS-1 bit @ 25°C	< 0.22 mm
Gouge Resistance	NACE TM0215, 50 kg wt., LS-1 bit @ 25°C	< 0.44 mm

32 33

34

35

36

37

ASTM A513 steel tubes made from Grade 60 Carbon Steel Tube with a 1.625 inch outside diameter and a 0.120 inch wall thickness. Both the inside and outside of the tube shall be zinc coated with G90 galvanizing in accordance with ASTM A653. Following zinc coating the tubes shall be coated in accordance with Section 9-07.5(1) item 1. The ends of the tube shall be capped to prevent intrusion of concrete or other materials.

38 39 40

The last paragraph is revised to read:

41 42 43

Stainless Steel Clad and Stainless Steel Tube Dowel bar ends shall be sealed with a patching material (primer and finish coat) used for patching epoxy-coated reinforcing steel as required in Section 9-07.3, item 6.

44 45 46

#### 9-07.7 Wire Mesh

This section is supplemented with the following:

1 2 3 4 5		rers shall participate in the NTPEP Audit Program for Reinforcing urers and shall be listed on the NTPEP audit program website NTPEP compliant.	
6 7	Section 9-08, Paints and January 7, 2019	I Related Materials	
8 9 10	<b>9-08.1(1) Description</b> The first sentence is revised	I to read:	
11 12 13 14 15 16	meeting the requirement Department of Defense	and bridge structure applications shall be made from materials ents of the applicable Federal and State Paint Specifications, e (DOD), American Society of Testing of Materials (ASTM), and ective Coatings (SSPC) specifications in effect at time of	
17 18 19	<b>9-08.1(2) Paint Types</b> This section is supplemente	d with the following new subsections:	
20 21 22 23	* *	AT Qualified Products List A d shall be part of a NEPCOAT system supplied by the same	
24 25 26 27		T Qualified Products List B d shall be part of a NEPCOAT system supplied by the same	
28 29 30	<b>9-08.1(2)D</b> Organic Zinc This section, including title,		
31 32	Vacant		
33 34 35	<b>9-08.1(2)E</b> Epoxy Polya This section is revised to real		
36 37 38	Epoxy polyamide shall SSPC Coating Standard	be a two-component system conforming to MIL-DTL-24441 or d No. 42.	
39 40 41	9-08.1(2)H Top Coat, Sin This section is revised to real	ngle-Component, Moisture-Cured Polyurethane	
42 43	Vehicle Type:	Moisture-cured aliphatic polyurethane.	
44 45 46	Color and Gloss:	Meet the SAE AMS Standard 595 Color as specified in the table below.	
47 48	The Top Coat shall mee	et the following requirements:	
49 50	The resin shall be	an aliphatic urethane.	
51			

The top coat shall be semi-gloss.

Color	Semi-Gloss
Washington Gray	26357
Mt. Baker Gray	26134
Mt. St. Helens Gray	26306
Cascade Green	24158

#### 9-08.1(2) Rust-Penetrating Sealer

This section is revised to read:

Rust-penetrating sealer shall be a two-component, chemically-cured, 100 percent solids epoxy.

# **9-08.1(2)J Black Enamel** This section is revised to read:

The enamel shall conform to Federal Specification MIL PRF 24635E Type II Class 2.

# 9-08.1(2)K Orange Equipment Enamel

The first paragraph is revised to read:

The enamel shall be an alkyd gloss enamel conforming to Federal Specification MIL-PRF-24635E Type II Class 1. The color, when dry, shall match that of SAE AMS Standard 595, color number 12246.

# 9-08.1(2)L Exterior Acrylic Latex Paint-White

The first paragraph is revised to read:

This paint shall conform to Federal Specification MIL-PRF-24635E Type II Class 1, 2 or 3.

# 9-08.1(7) Acceptance

 This section is revised to read:

For projects with moisture-cured polyurethane quantities less than 20 gallons, acceptance will be by the Manufacturer's Certificate of Compliance.

 For projects with moisture-cured polyurethane quantities greater than 20 gallons, the product shall be listed in the current WSDOT Qualified Products List (QPL). If the lot number is listed on the QPL, it may be accepted without additional testing. If the lot number is not listed on the QPL, a 1 quart sample shall be submitted to the State Materials Laboratory for testing and acceptance.

For all other paint types, acceptance will be based on visual inspection.

# 9-08.1(8) Standard Colors

 In the first paragraph, the reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

The second paragraph is revised to read:

Unless otherwise specified, all top or finish coats shall be semi-gloss, with the paint falling within the range of 35 to 70 on the 60-degree gloss meter.

# **9-08.2 Powder Coating Materials for Coating Galvanized Surfaces** The last paragraph is revised to read:

ır

Repair materials shall be as recommended by the powder coating manufacturer and as

specified in the Contractor's powder coating plan as accepted by the Engineer.

#### 9-08.3 Pigmented Sealer Materials for Coating of Concrete Surfaces

This section, including title, is revised to read:

#### 9-08.3 Concrete Surface Treatments

#### 9-08.3(1) Pigmented Sealer Materials

The pigmented sealer shall be a semi-opaque, colored toner containing only methyl methacrylate-ethyl acrylate copolymer resins, toning pigments suspended in solution at all times by a chemical suspension agent, and solvent. Toning pigments shall be laminar silicates, titanium dioxide, and inorganic oxides only. There shall be no settling or color variation. Tinting shall occur at the factory at the time of manufacture and placement in containers, prior to initial shipment. Use of vegetable or marine oils, paraffin materials, stearates, or organic pigments in any part of coating formulation will not be permitted. The color of pigmented sealer shall be as specified by the Contracting Agency. The Contractor shall submit a 1-quart wet sample, a drawdown color sample, and spectrophotometer or colorimeter readings taken in accordance with ASTM D2244, for each batch and corresponding standard color card. The calculated Delta E shall not exceed 1.5 from the Commission Internationale de l'Eclairage (CIELAB) when measured at 10 degrees Standard Observer and Illuminant D 65.

The 1-quart wet sample shall be submitted in the manufacturer's labeled container with product number, batch number, and size of batch. The companion drawdown color sample shall be labeled with the product number, batch number, and size of batch. The Contractor shall submit the specified samples and readings to the Engineer at least 14 calendar days prior to the scheduled application of the sealer. The Contractor shall not begin applying pigmented sealer until receiving the Engineer's written approval of the pigmented sealer color samples.

# 9-08.3(2) Exposed Aggregate Concrete Coatings and Sealers 9-08.3(2)A Retardant Coating

Retardant coating shall exhibit the following properties:

 Retards the set of the surface mortar of the concrete without preventing the concrete to reach the specified 28 day compressive strength.

 2. Leaves the aggregate with its original color and luster, and firmly embedded in the concrete matrix.

 Allows the removal of the surface mortar in accordance with the methods specified in Section 6-02.3(14)E without the use of acidic washing compounds. 4. Allows for uniform removal of the surface mortar.
 If the Contractor proposes use of a retardant coating the current WSDOT QPL, the Contractor shall submit a Type

If the Contractor proposes use of a retardant coating that is not listed in the current WSDOT QPL, the Contractor shall submit a Type 2 Working Drawing consisting of a one quart product sample from a current lot along with supporting product information, Safety Data Sheet, and a Manufacturer's Certificate of Compliance stating that the product conforms to the above performance requirements.

# 9-08.3(2)B Clear Sealer

The sealer for concrete surfaces with exposed aggregate finish shall be a clear, non-gloss, penetrating sealer of either a silane, siloxane, or silicone based formulation.

#### 9-08.3(3) Permeon Treatment

Permeon treatment shall be a product of known consistent performance in producing the SAE AMS Standard 595 Color No. 30219 target color hue established by WSDOT, either selected from the WSDOT Qualified Products List (QPL), or an equivalent product accepted by the Engineer. For acceptance of products not listed in the current WSDOT QPL, the Contractor shall submit Type 3 Working Drawings consisting of a one quart product sample from a current lot, supporting product information and a Safety Data Sheet.

9-13 AP9

# Section 9-13, Riprap, Quarry Spalls, Slope Protection, and Rock for Erosion and Scour Protection and Rock Walls

April 2, 2018

# 9-13.1(1) General

The last paragraph is revised to read:

Riprap and quarry spalls shall be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather and shall meet the following test requirements:

#### 9-13.5 Concrete Slope Protection

This section is revised to read:

Concrete slope protection shall consist of reinforced portland cement or blended hydraulic cement concrete poured or pneumatically placed upon the slope with a rustication joint pattern or semi-open concrete masonry units placed upon the slope closely adjoining each other.

#### 9-13.5(2) Poured Portland Cement Concrete Slope Protection

This section's title is revised to read:

# Poured Portland Cement or Blended Hydraulic Cement Concrete Slope Protection

# **9-13.5(3)** Pneumatically Placed Portland Cement Concrete Slope Protection This section's title is revised to read:

# **Pneumatically Placed Portland Cement or Blended Hydraulic Cement Concrete Slope Protection**

3 4

1

2

The first paragraph is revised to read:

5 6 7

Cement - This material shall be portland cement or blended hydraulic cement as specified in Section 9-01.

8 9

# 9-13.7(1) Rock for Rock Walls and Chinking Material

10 11 The first paragraph (up until the colon) is revised to read: Rock for rock walls and chinking material shall be hard, sound and durable material,

12 13

free from seams, cracks, and other defects tending to destroy its resistance to weather, and shall meet the following test requirements:

14 15

18

9-14 AP9

16 17

# Section 9-14, Erosion Control and Roadside Planting

**August 6. 2018** 

# 19

20 21

# 9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

In Table 1, the last four rows are deleted.

22

# 9-14.4(2)A Long-Term Mulch

23 24 The first paragraph is supplemented with the following:

25 26

Products containing cellulose fiber produced from paper or paper components will not be accepted.

27 28

Table 2 is supplemented with the following new rows:

29

Water Holding Capacity	ASTM D 7367	800 percent minimum
Organic Matter Content	AASHTO T 267	90 percent minimum
Seed Germination	ASTM D 7322	Long Term
Enhancement		420 percent minimum

30 31 32

33

34 35

36

# 9-14.4(2)B Moderate-Term Mulch

This section is revised to read:

37 38 39 Within 48 hours of application, the Moderate-Term Mulch shall bond with the soil surface to create a continuous, absorbent, flexible, erosion-resistant blanket. Moderate-Term Mulch shall effectively perform the intended erosion control function in accordance with Section 8-01.3(1) for a minimum of 3 months, or until temporary vegetation has been established, whichever comes first.

40 41

Moderate-Term Mulch shall not be used in conjunction with permanent seeding.

42 43

# 9-14.4(2)C Short-Term Mulch

44 45 This section is revised to read:

46 47

Short-Term Mulch shall effectively perform the intended erosion control function in accordance with Section 8-01.3(1) for a minimum of 2 months, or until temporary

3	,
4 5 6	9-16.AP9 Section 9-16, Fence and Guardrail August 6, 2018
7 8 9	9-16.3(1) Rail Element The last sentence of the first paragraph is revised to read:
10 11 12 13	All rail elements shall be formed from 12-gage steel except for thrie beam reducer sections, reduced length thrie beam rail elements, thrie beams used for bridge rail retrofits, and Design F end sections, which shall be formed from 10-gage steel.
14 15 16	9-16.3(5) Anchors The last paragraph is revised to read:
17 18 19	Cement grout shall conform to Section 9-20.3(4) and consist of one part portland cement or blended hydraulic cement and two parts sand.
20 21 22	9-18.AP9 Section 9-18, Precast Traffic Curb April 2, 2018
23 24 25	9-18.1(1) Aggregates and Proportioning Item number 1 of the first paragraph is revised to read:
26 27 28	<ol> <li>Portland cement or blended hydraulic cement shall conform to the requirements of Section 9-01 except that it may be Type I portland cement conforming to AASHTO M 85.</li> </ol>
29 30 31 32	9-20.AP9 Section 9-20, Concrete Patching Material, Grout, and Mortar April 1, 2019
33 34 35	9-20.1 Patching Material This section, including title, is revised to read:
36 37 38 39	<b>9-20.1 Patching Material for Cement Concrete Pavement</b> Concrete patching material shall be prepackaged mortar extended with aggregate. The amount of aggregate for extension shall conform to the manufacturer's recommendation.
40 41 42 43 44 45	Patching mortar and patching mortar extended with aggregate shall contain cementitious material and conform to Sections 9-20.1(1) and 9-20.1(2). The Manufacturer shall use the services of a laboratory that has an equipment calibration verification system and a technician training and evaluation process in accordance with AASHTO R 18 to perform all tests specified in Section 9-20.1.

vegetation has been established, whichever comes first. Short-Term Mulch shall not be

used in conjunction with permanent seeding.

9-20.1(1) Patching Mortar

Compressive Strength

1

2

46

47 48

**Specification** 

**ASTM Test Method** 

Patching mortar shall conform to the following requirements:

15

16 17

20
21
22
23
24
25
26
27
28

at 3 hours	C 39	Minimum 3,000 psi	
at 24 hours	C 39	Minimum 5,000 psi	
Length Change			
at 28 days	C 157	0.15 percent maximum	
Total Chloride Ion Content	C 1218	1 lb/yd <sup>3</sup> maximum	
Bond Strength			
at 24 hours	C 882 (As modified by C	Minimum 1,000 psi	
	928, Section 9.5)		
Scaling Resistance (at 25		1 lb/ft <sup>2</sup> maximum	
cycles of freezing and	928, Section 9.4)		
thawing)			

#### 9-20.1(2) Patching Mortar Extended with Aggregate

Patching mortar extended with aggregate shall meet the following requirements:

Compressive Strength	ASTM Test Method	Specification
at 3 hours	C 39	Minimum 3,000 psi
at 24 hours	C 39	Minimum 5,000 psi
Length Change		
at 28 days	C 157	0.15 percent maximum
Bond Strength		
at 24 hours	C 882 (As modified by ASTM C928, Section 9.5)	Minimum 1,000 psi
Scaling Resistance (at 25 cycles of freezing and thawing)	C 672	2 Maximum Visual Rating
Freeze thaw	C 666	Maximum expansion 0.10% Minimum durability 90.0%

#### 9-20.1(3) Aggregate

Aggregate used to extend the patching mortar shall conform to Section 9-03.1(4) and be AASHTO Grading No. 8. A Manufacturer's Certificate of Compliance shall be submitted showing the aggregate source and the gradation. Mitigation for Alkali Silica Reaction (ASR) will not be required for the extender aggregate used for concrete patching material.

#### 9-20.1(4) Water

Water shall meet the requirements of Section 9-25.1. The quantity of water shall be within the limits recommended by the repair material manufacturer.

#### 9-20.2 Specifications

This section, including title, is revised to read:

### 9-20.2 Patching Material for Concrete Structure Repair

Concrete patching material shall be a prepackaged mixture of portland or blended hydraulic cement, aggregate, and admixtures. Fly ash, ground granulated blast furnace slag and microsilica fume may be used. The concrete patching material may be shrinkage compensated. The concrete patching material shall also meet the following requirements:

Compressive strength of 6000 psi or higher at 28 days in accordance with AASHTO T 22 (ASTM C 39), unless noted otherwise

2

3 4

5

6

- Bond strength of 250 psi or higher at 28 days or less in accordance with ASTM C 1583 or ICRI 210.3R
- Shrinkage shall be 0.05 percent (500 microstrain) or lower at 28 days in accordance with AASHTO T 160 (ASTM C 157) as modified by ICRI 320.3R
- Permeability shall be 2,000 coulombs or lower at 28 days in accordance with AASHTO T 277 (ASTM C 1202)
- Freeze-thaw resistance shall have a durability factor of 90 percent or higher after a minimum of 300 cycles in accordance with AASHTO T 161 Procedure A (ASTM C 666)
- Soluble chloride ion limits in Section 6-02.3(2) shall be satisfied

#### 9-20.2(1) Patching Mortar

This section, including title, is deleted in its entirety.

#### 9-20.2(2) Patching Mortar Extended with Aggregate

This section, including title, is deleted in its entirety.

#### 9-20.3(3) Grout Type 3 for Unconfined Bearing Pad Applications

This section's title is revised to read:

#### **Grout Type 3 for Unconfined Applications**

This section is revised to read:

Grout Type 3 shall be a prepackaged material that does not include expansive admixtures meeting the following requirements:

- Compressive strength shall be 4000 psi or higher at 28 days in accordance with AASHTO T 22 (ASTM C 39) for grout extended with coarse aggregate or AASHTO T 106 (ASTM C109) otherwise.
- Bond strength shall meet one of the following:
  - 250 psi or higher at 28 days or less in accordance with ASTM C1583.
  - 2000 psi or higher at 28 days or less in accordance with ASTM C882. The following modification to ASTM C882 is acceptable: use Type 3 Grout in lieu of epoxy resin base bonding system and freshly mixed portland-cement mortar in the procedure for testing Type II and V systems.
- Drying shrinkage shall be 0.08 percent (800 microstrain) or lower at 28 days in accordance with AASHTO T 160 (ASTM C157). The following modification to AASHTO T 160 is acceptable: use a standard specimen size of 3 x 3 x 11-1/4 inches.

#### 9-20.5 Bridge Deck Repair Material

Item number 3 of the first paragraph is revised to read:

1 2 3 4	<ol> <li>Permeability of less than 2,000 coulombs at 28-days or more in accordance with AASHTO T 277.</li> <li>9-21.AP9</li> </ol>
5 6	Section 9-21, Raised Pavement Markers (RPM) January 2, 2018
7 8 9	9-21.2 Raised Pavement Markers Type 2 This section's content is deleted.
10 11	9-21.2(1) Physical Properties This section, including title, is revised to read:
12 13 14 15 16 17	<b>9-21.2(1) Standard Raised Pavement Markers Type 2</b> The marker housing shall contain reflective faces as shown in the Plans to reflect incident light from either a single or opposite directions and meet the requirements of ASTM D 4280 including Flexural strength requirements.
18 19 20	9-21.2(2) Optical Requirements This section, including title, is revised to read:
21 22 23 24 25 26 27 28	<b>9-21.2(2)</b> Abrasion Resistant Raised Markers Type 2 Abrasion Resistant Raised Markers Type 2 shall comply with Section 9-21.2(1) and meet the requirements of ASTM D 4280 with the following additional requirement: The coefficient of luminous intensity of the markers shall be measured after subjecting the entire lens surface to the test described in ASTM D 4280 Section 9.5 using a sand drop apparatus. After the exposure described above, retroreflected values shall not be less than 0.5 times a nominal unblemished sample.
29 30 31	9-21.2(3) Strength Requirements This section is deleted in its entirety.
32 33 34	9-23.AP9 Section 9-23, Concrete Curing Materials and Admixtures April 1, 2019
35 36 37	9-23.12 Natural Pozzolan This section is revised to read:
38 39 40 41	Natural Pozzolans shall be ground Pumice and shall conform to the requirements of AASHTO M295 Class N, including supplementary optional chemical requirements as set forth in Table 2.
42 43 44	9-23.13 Blended Supplementary Cementitious Material The second sentence is revised to read:
45 46 47	Blended SCMs shall be limited to binary or ternary blends of fly ash, ground granulated blast furnace slag and microsilica fume.
48 49	The second to last sentence is deleted.

- 1 9-26 AP9
- 2 Section 9-26, Epoxy Resins
- 3 **January 7, 2019**

#### 9-26.1(1) General

The following new sentence is inserted after the first sentence of the first paragraph:

For pre-packaged cartridge kits, the epoxy bonding agent shall meet the requirements of ASTM C881 when mixed according to manufacturer instructions, utilizing the manufacturer's mixing nozzle.

10 11

4

5

6 7

8

9

12

13 14

15

#### 9-26.1(2) Packaging and Marking

The first sentence of the first paragraph is revised to read:

The components of the epoxy system furnished under these Specifications shall be supplied in separate containers or pre-packaged cartridge kits that are non-reactive with the materials contained.

16 17 18

The second paragraph is revised to read:

19 20

21

22

Separate containers shall be marked by permanent marking that identify the formulator, "Component A" (contains the Epoxy Resin) and "Component B" (Contains the Curing Agent), type, grade, class, lot or batch number, mixing instructions and the quantity contained in pounds or gallons as defined by these Specifications.

23 24 25

The following new paragraph is inserted after the second paragraph:

26 27

28

Pre-packaged cartridge kits shall be marked by permanent marking that identify the formulator, type, grade, class, lot or batch number, mixing instructions and the quantity contained in ounces or milliliters as defined by these Specifications.

29 30

9-28 AP9

31 32

Section 9-28, Signing Materials and Fabrication

33 April 1, 2019

# 9-28.2 Manufacturer's Identification and Date

The second sentence is revised to read:

35 36 37

38

34

In addition, the width and height dimension, in inches, the Contract number, and the number of the sign as it appears in the Plans shall be placed using 3-inch series C black letters on the back of destination, distance, and large special signs.

39 40 41

#### 9-28.10 Vacant

This section, including title, is revised to read:

42 43 44

45

#### 9-28.10 Digital Printing

50

Transparent and opaque durable inks used in digital printed sign messages shall be as recommended by the manufacturer. When properly applied, digital printed colors shall have a warranty life of the base retroreflective sign sheeting. Digital applied colors shall present a smooth surface, free from foreign material, and all messages and borders shall be clear and sharp. Digital printed signs shall conform to 70% of the retroreflective minimum values established for its type and color. Digitally printed signs shall meet the

 daytime color and luminance, and nighttime color requirements of ASTM D 4956. No variations in color or overlapping of colors will be permitted. Digital printed permanent traffic signs shall have an integrated engineered match component clear protective overlay recommended by the sheeting manufacturer applied to the entire face of the sign. On Temporary construction/maintenance signs printed with black ink only, the protective overlay film is optional, as long as the finished sign has a warranty of a minimum of three years from sign sheeting manufacturer.

All digital printed traffic control signs shall be an integrated engineered match component system. The integrated engineered match component system shall consist of retroreflective sheeting, durable ink(s), and clear overlay film all from the same manufacturer applied to aluminum substrate conforming to Section 9-28.8.

The sign fabricator shall use an approved integrated engineered match component system as listed on the Qualified Products List (QPL). Each approved digital printer shall only use the compatible retroreflective sign sheeting manufacturer's engineered match component system products.

Each retroreflective sign sheeting manufacturer/integrated engineered match component system listed on the QPL shall certify a department approved sign fabricator is approved to operate their compatible digital printer. The sign fabricator shall re-certify annually with the retroreflective sign manufacturer to ensure their digital printer is still meeting manufacturer's specifications for traffic control signs. Documentation of each recertification shall be submitted to the QPL Engineer annually.

#### 9-28.11 Hardware

The last paragraph is revised to read:

All steel parts shall be galvanized in accordance with AASHTO M111. Steel bolts and related connecting hardware shall be galvanized in accordance with ASTM F 2329.

#### 9-28.14(2) Steel Structures and Posts

The first sentence of the third paragraph is revised to read:

Anchor rods for sign bridge and cantilever sign structure foundations shall conform to Section 9-06.5(4), including Supplemental Requirement S4 tested at -20°F.

In the second sentence of the fourth paragraph, "AASHTO M232" is revised to read "ASTM F 2329".

The first sentence of the fifth paragraph is revised to read:

Except as otherwise noted, steel used for sign structures and posts shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

The last sentence of the last paragraph is revised to read:

If such modifications are contemplated, the Contractor shall submit a Type 2 Working Drawing of the proposed modifications.

- 1 9-29.AP9
- 2 Section 9-29, Illumination, Signal, Electrical
- 3 April 1, 2019

#### 9-29.1 Conduit, Innerduct, and Outerduct

This section is supplemented with the following new subsections:

#### 9-29.1(10) Pull Tape

Pull tape shall be pre-lubricated polyester pulling tape. The pull tape shall have a minimum width of ½-inch and a minimum tensile strength of 500 pounds. Pull tape may have measurement marks.

#### 9-29.1(11) Foam Conduit Sealant

Foam conduit sealant shall be self-expanding waterproof foam designed to prevent both water and pest intrusion. The foam shall be designed for use in and around electrical equipment, including both insulated and bare conductors.

#### 9-29.2(1) Junction Boxes

The first paragraph is revised to read:

For the purposes of this Specification concrete is defined as portland cement or blended hydraulic cement concrete and non-concrete is all others.

#### 9-29.2(1)A2 Non-Concrete Junction Boxes

The first paragraph is revised to read:

Material for the non-concrete junction boxes shall be of a quality that will provide for a similar life expectancy as portland cement or blended hydraulic cement concrete in a direct burial application.

#### 9-29.2(2)A Standard Duty Cable Vaults and Pull Boxes

In the table in the last paragraph, the fourth, fifth and sixth rows are revised to read:

Slip Resistant Lid	ASTM A36 steel
Frame	ASTM A36 steel
Slip Resistant Frame	ASTM A36 steel

# 9-29.3(2)A1 Single Conductor Current Carrying

This second sentence is revised to read:

 Insulation shall be XLP (cross-linked polyethylene) or EPR (Ethylene Propylene Rubber), Type USE (Underground Service Entrance) or USE-2, and rated for 600-volts or higher.

#### 9-29.6 Light and Signal Standards

In the first sentence of the third paragraph, "AASHTO M232" is revised to read "ASTM F 2329".

Item number 2 of the last paragraph is revised to read:

2. The steel light and signal standard fabricator's shop drawing submittal, including supporting design calculations, submitted as a Type 2E Working Drawing in accordance with Section 8-20.2(1) and the Special Provisions.

#### 9-29.6(1) Steel Light and Signal Standards

In the second paragraph, "AASHTO M232" is revised to read "ASTM F 2329".

3 4 5

The first sentence of the last paragraph is revised to read:

6 7

Steel used for light and signal standards shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

8 9 10

# 9-29.6(5) Foundation Hardware

In the last paragraph, "AASHTO M232" is revised to read "ASTM F 2329".

11 12 13

# 9-29.10(1) Conventional Roadway Luminaires

14 15 This section is revised to read:

16 17 All conventional roadway luminaires shall meet 3G vibration requirements as described in ANSI C136.31.

18 19 20

21

22

All luminaires shall have housings fabricated from aluminum. The housing shall be painted flat gray, SAE AMS Standard 595 color chip No. 26280, unless otherwise specified in the Contract. Painted housings shall withstand a 1,000 hour salt spray test as specified in ASTM B117.

23 24

25

26

27

28

29

Each housing shall include a four bolt slip-fitter mount capable of accepting a nominal 2" tenon and adjustable within +/- 5 degrees of the axis of the tenon. The clamping bracket(s) and the cap screws shall not bottom out on the housing bosses when adjusted within the +/- 5 degree range. No part of the slipfitter mounting brackets on the luminaires shall develop a permanent set in excess of 0.2 inch when the cap screws used for mounting are tightened to a torque of 32 foot-pounds. Each luminaire shall include leveling reference points for both transverse and longitudinal adjustment.

30 31 32

All luminaires shall include shorting caps when shipped. The caps shall be removed and provided to the Contracting Agency when an alternate control device is required to be installed in the photocell socket. House side shields shall be included when required by the Contract. Order codes shall be modified to the minimum extent necessary to include the option for house side shields.

33

This section is supplemented with the following new subsections:

38 39 40

#### 9-29.10(1)A High Pressure Sodium (HPS) Conventional Roadway Luminaires

HPS conventional roadway luminaires shall meet the following requirements:

42 43 44

41

General shape shall be "cobrahead" style, with flat glass lens and full cutoff

45 46 optics.

47 48 2. Light pattern distribution shall be IES Type III.

49 50 51

3. The reflector of all luminaires shall be of a snap-in design or secured with screws. The reflector shall be polished aluminum or prismatic borosilicate glass.

- 4. Flat lenses shall be formed from heat resistant, high-impact, molded borosilicate or tempered glass.
- 5. The lens shall be mounted in a doorframe assembly, which shall be hinged to the luminaire and secured in the closed position to the luminaire by means of an automatic latch. The lens and doorframe assembly, when closed, shall exert pressure against a gasket seat. The lens shall not allow any light output above 90 degrees nadir. Gaskets shall be composed of material capable of withstanding the temperatures involved and shall be securely held in place.
- 6. The ballast shall be mounted on a separate exterior door, which shall be hinged to the luminaire and secured in the closed position to the luminaire housing by means of an automatic type of latch (a combination hex/slot stainless steel screw fastener may supplement the automatic-type latch).
- 7. Each luminaire shall be capable of accepting a 150, 200, 250, 310, or 400 watt lamp complete and associated ballast. Lamps shall mount horizontally.

**9-29.10(1)B Light Emitting Diode (LED) Conventional Roadway Luminaires** LED Conventional Roadway Luminaires are divided into classes based on their equivalent High Pressure Sodium (HPS) luminaires. Current classes are 200W, 250W, 310W, and 400W. LED luminaires are required to be pre-approved in order to verify their photometric output. To be considered for pre-approval, LED luminaires must meet the requirements of this section.

LED luminaires shall include a removable access door, with tool-less entry, for access to electronic components and the terminal block. The access door shall be removable, but include positive retention such that it can hang freely without disconnecting from the luminaire housing. LED drivers may be mounted either to the interior of the luminaire housing or to the removable door itself.

LED drivers shall be removable for user replacement. All internal modular components shall be connected by means of mechanical plug and socket type quick disconnects. Wire nuts may not be used for any purpose. All external electrical connections to the luminaire shall be made through the terminal block.

LED luminaires shall include a 7-pin NEMA photocell receptacle. The LED driver(s) shall be dimmable from ten volts to zero volts. LED output shall have a Correlated Color Temperature (CCT) of 4000K nominal (4000-4300K) and a Color Rendering Index (CRI) of 70 or greater. LED output shall be a minimum of 85% at 75,000 hours at 25 degrees Celsius.

LED luminaires shall be available for 120V, 240V, and 480V supply voltages. Voltages refer to the supply voltages to the luminaires present in the field. LED power usage shall not exceed the following maximum values for the applicable wattage class:

Class	Max. Wattage
200W	110W
250W	165W
310W	210W
400W	275W

Only one brand of LED conventional roadway luminaire may be used on a Contract. They do not necessarily have to be the same brand as any high-mast, underdeck, or wall-mount luminaires when those types of luminaires are specified in the Contract. LED luminaires shall include a standard 10 year manufacturer warranty.

The list of pre-approved LED Conventional Roadway Luminaires is available at http://www.wsdot.wa.gov/Design/Traffic/ledluminaires.htm.

#### 9-29.10(2) Decorative Luminaires

 This section, including title, is revised to read:

9-29.10(2) Vacant

#### 9-29.12 Electrical Splice Materials

This section is supplemented with the following new subsections:

# 9-29.12(3) Splice Enclosures

# 9-29.12(3)A Heat Shrink Splice Enclosure

Heat shrink splice enclosures shall be medium or heavy wall cross-linked polyolefin, meeting the requirements of AMS-DTL-23053/15, with thermoplastic adhesive sealant. Heat shrink splices used for "wye" connections require rubber electrical mastic tape.

#### 9-29.12(3)B Molded Splice Enclosure

Molded splice enclosures shall use epoxy resin in a clear rigid plastic mold. The material used shall be compatible with the insulation material of the insulated conductor or cable. The component materials of the resin insulation shall be packaged ready for convenient mixing without removing from the package.

#### 9-29.12(4) Re-Enterable Splice Enclosure

Re-enterable splice enclosures shall use either dielectric grease or a flexible resin contained in a two-piece plastic mold. The mold shall either snap together or use stainless steel hose clamps.

# 9-29.12(5) Vinyl Electrical Tape for Splices

Vinyl electrical tape in splicing applications shall meet the requirements of MIL-I-24391C.

# 9-29.12(1) Illumination Circuit Splices

Underground illumination circuit splices shall be solderless crimped connections capable of securely joining the wires, both mechanically and electrically, as defined in Section 8-20.3(8). Aerial illumination splices shall be solderless crimp connectors or split bolt vice-type connectors.

# 9-29.12(1)A Heat Shrink Splice Enclosure

This section is deleted in its entirety.

This section is revised to read:

# 9-29.12(1)B Molded Splice Enclosure

 This section is deleted in its entirety.

This section is revised to read:

 Induction loop splices and magnetometer splices shall use an uninsulated barrel-type crimped connector capable of being soldered.

# **9-29.13(10)D** Cabinets for Type 170E and 2070 Controllers The first sentence of item number 4 is revised to read:

A disposable paper filter element with dimensions of 12" × 16" × 1" shall be provided in lieu of a metal filter.

Item number 6 is revised to read:

6. LED light strips shall be provided for cabinet lighting, powered from the Equipment breaker on the Power Distribution Assembly. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4100K (cool white) or higher. There shall be three light strips for each rack within the cabinet. Lighting shall be ceiling mounted – rack mounted lighting is not permitted. Light strips shall be installed in the locations shown in the Standard Plans. Lighting shall not interfere with the proper operation of any other ceiling mounted equipment. All lighting fixtures above a rack shall energize automatically when either door to that respective rack is opened. Each door switch shall be labeled "Light".

Item number 7 is revised to read:

7. Rack mounted equipment shall be as shown in the Standard Plans. The cabinet shall use PDA #2LX and Output File #1LX. Where an Auxiliary Output File is required, Output File #2LX shall also be included.

This section is supplemented with the following new item:

P. The PCB connectors for Field Terminal Blocks FT1 through FT6 on Output Files #1LX and #2LX shall be capable of accepting minimum 14 AWG field wiring, have a pitch of 5.08 mm, and use screw flange type locking to secure the plug and socket connection. The sockets on the Field Terminal Panel shall be secured to the panel such that unplugging a connector will not result in the socket moving or separating from the panel.

# 9-29.13(11) Traffic Data Accumulator and Ramp Meters

2. Rack mounted equipment shall be as shown in the Standard Plans.

Item number 3 is revised to read:

Item number 2 is revised to read:

3. PDA #3LX shall be furnished with three Model 200 Load Switches installed. PDA #3LX shall be modified to include a second Model 430 transfer relay, mounted on the rear of the PDA and wired as shown in the Standard Plans.

#### 9-29.13(12) ITS Cabinet

This section's title is revised to read:

### Type 331L ITS Cabinet

The first paragraph (excluding the numbered list) is revised to read:

Basic ITS cabinets shall be Model 331L Cabinets, unless otherwise specified in the Contract. Type 331L Cabinets shall be constructed in accordance with the TEES, with the following modifications:

Item number 6 of the first paragraph is revised to read:

6. LED light strips shall be provided for cabinet lighting, powered from the Equipment breaker on the Power Distribution Assembly. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4100K (cool white) or higher. There shall be three light strips for each rack within the cabinet. Lighting shall be ceiling mounted – rack mounted lighting is not permitted. Light strips shall be installed in the locations shown in the Standard Plans. Lighting shall not interfere with the proper operation of any other ceiling mounted equipment. All lighting fixtures above a rack shall energize automatically when either door to that respective rack is opened. Each door switch shall be labeled "Light".

# 9-29.16(2)E Painting Signal Heads

In the first sentence, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

# 9-29.17 Signal Head Mounting Brackets and Fittings

 In the first paragraph, item number 2 under **Stainless Steel** is revised to read:

Bands or cables for Type N mount.

#### 9-29.20 Pedestrian Signals

 In item 2C of the second paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

#### 9-29.24 Service Cabinets

 The third sentence of item number 6 is revised to read:

 The dead front cover shall have cutouts for the entire breaker array, with blank covers where no circuit breakers are installed.

 Item number 8 is revised to read:

 8. Lighting contactors shall meet the requirements of Section 9-29.24(2).

 The last sentence of item number 10 is revised to read:

 Dead front panels shall prevent access to any exposed, live components, and shall cover all equipment except for circuit breakers (including blank covers), the photocell test/bypass switch, and the GFCI receptacle.

#### 9-29.24(2) Electrical Circuit Breakers and Contactors

This section is revised to read:

6

7

1

All circuit breakers shall be bolt-on type, with the RMS-symmetrical interrupting capacity described in this Section. Circuit breakers for 120/240/277 volt circuits shall be rated at 240 or 277 volts, as applicable, with an interrupting capacity of not less than 10,000 amperes. Circuit breakers for 480 volt circuits shall be rated at 480 volts, and shall have an interrupting capacity of not less than 14,000 amperes.

8 9 10

11

12

13

16

Lighting contactors shall be rated for tungsten or ballasted (such as sodium vapor, mercury vapor, metal halide, and fluorescent) lamp loads. Contactors for 120/240/277 volt circuits shall be rated at 240 volts maximum line to line voltage, or 277 volts maximum line to neutral voltage, as applicable. Contactors for 480 volt circuits shall be rated at 480 volt maximum line to line voltage.

14 15

9-33.AP9

#### Section 9-33, Construction Geosynthetic 17

18 August 6, 2018

# 9-33.4(1) Geosynthetic Material Approval

The second sentence of the first paragraph is revised to read:

20 21 22

23 24

19

If the geosynthetics material is not listed in the current WSDOT QPL, a Manufacturer's Certificate of Compliance including Certified Test Reports of each proposed geosynthetic shall be submitted to the State Materials Laboratory in Tumwater for evaluation.

25 26

The last paragraph is revised to read:

27 28

29

30

31

32

Geosynthetics used as reinforcement in permanent geosynthetic retaining walls, reinforced slopes, reinforced embankments, and other geosynthetic reinforcement applications require proof of compliance with the National Transportation Product Evaluation Program (NTPEP) in accordance with AASHTO Standard Practice R 69, Standard Practice for Determination of Long-Term Strength for Geosynthetic Reinforcement.

33 34

35 9-34.AP9

#### 36 Section 9-34, Pavement Marking Material 37

**January 7, 2019** 

# 9-34.2(2) Color

The first sentence is revised to read:

39 40 41

38

Paint draw-downs shall be prepared according to ASTM D823.

42 43

Each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

44 45

# 9-34.2(3) Prohibited Materials

46 47

This section is revised to read:

48 49

Traffic paint shall not contain mercury, lead, chromium, diarylide pigments, toluene, chlorinated solvents, hydrolysable chlorine derivatives, ethylene-based glycol ethers and their acetates, nor any other EPA hazardous waste material over the regulatory levels in accordance with CFR 40 Part 261.24.

# 9-34.2(5) Low VOC Waterborne Paint

5 6 The heading "Standard Waterborne Paint" is supplemented with "Type 1 and 2".

7

The heading "High-Build Waterborne Paint" is supplemented with "Type 4".

8 9

The heading "Cold Weather Waterborne Paint" is supplemented with "Type 5".

10 11

In the row beginning with "° @90°F", each minimum value is revised to read "60".

12 13

In the row beginning with "Fineness of Grind, (Hegman Scale)", each minimum value is revised to read "3".

14 15 16

17

The last four rows are replaced with the following:

Vehicle Composition	ASTM D 2621	100% acrylic emulsion	100% cross-linking	100% acrylic emulsion
Freeze-Thaw Stability, KU	ASTM D 2243 and D 562	@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU	acrylic <sup>4</sup> @ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU	@ 3 cycles show no coagulation or change in viscosity greater than ± 10 KU
Heat Stability	ASTM D 562 <sup>2</sup>	± 10 KU from the initial viscosity	± 10 KU from the initial viscosity	± 10 KU from the initial Viscosity
Low Temperature Film Formation	ASTM D 2805 <sup>3</sup>	No Cracks*		No Cracks
Cold Flexibility <sup>5</sup>	ASTM D522	Pass at 0.5 in mandrel*		
Test Deck Durability <sup>6</sup>	ASTM D913	≥70% paint retention in wheel track*		
Mud Cracking	(See note 7)	No Cracks	No Cracks	

18 19

20

21

After the preceding Amendments are applied, the following new column is inserted after the "Standard Waterborne Paint Type 1 and 2" column:

Semi-Durable Waterborne Paint Type 3			
White		Yellow	
Min.	Min. Max.		Max.
Within	± 0.3 of qua	alification s	ample
80	95	80	95
60		60	
77		77	
	65		65
43		43	
	1.25		1.25
3		3	
0.98		0.96	
88		50	
100°		100°	
9.5		9.5	
	10		10

100% acrylic emulsion
@ 5 cycles show no coagulation or
change in viscosity greater than ± 10 KU
± 10 KU from the initial viscosity
No Cracks
Pass at 0.25 in mandrel
≥70% paint retention in wheel track
No Cracks

The footnotes are supplemented with the following:

 <sup>5</sup>Cold Flexibility: The paint shall be applied to an aluminum panel at a wet film thickness of 15 mils and allowed to dry under ambient conditions (50±10% RH and 72±5 °F) for 24 hours. A cylindrical mandrel apparatus (in accordance with ASTM D522 method B) shall be put in a 40°F refrigerator when the paint is drawn down. After 24 hours, the aluminum panel with dry paint shall be put in the 40°F refrigerator with the mandrel apparatus for 2 hours. After 2 hours, the panel and test apparatus shall be removed and immediately tested to according to ASTM D522 to evaluate cold flexibility. Paint must show no evidence of cracking, chipping or flaking when bent 180 degrees over a mandrel bar of specified diameter.

<sup>4</sup>Cross-linking acrylic shall meet the requirements of federal specification TT-P-1952F

<sup>6</sup>NTPEP test deck, or a test deck conforming to ASTM D713, shall be conducted for a minimum of six months with the following additional requirements: it shall be applied at 15 wet mils to a test deck that is located at 40N latitude or higher with at least 10,000 ADT and which was applied during the months of September through November.

<sup>7</sup>Paint is applied to an approximately 4"x12" aluminum panel using a drawdown bar with a 50 mil gap. The coated panel is allowed to dry under ambient conditions (50±10% RH and 72±5 °F) for 24 hours. Visual evaluation of the dry film shall reveal no cracks.

#### 9-34.3 Plastic

Section 3.1.1.

In the first sentence of the last paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

#### 9-34.3(2) Type B – Pre-Formed Fused Thermoplastic

7 .....

In the last two paragraphs, each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

#### 9-34.3(4) Type D – Liquid Cold Applied Methyl Methacrylate

The Test Method value for **Adhesion to PCC or HMA**, **psi** is revised to read "ASTM D45411".

# 9-34.4 Glass Beads for Pavement Marking Materials

 In the Test Method column of the table titled Metal Concentration Limits, "EPA 3052 SW-846 6010C" is revised to read "EPA 3052 SW-846 6010D".

# 9-34.5(1) Temporary Pavement Marking Tape – Short Duration

42 T

This section, including title, is revised to read:

1	9-34.5(1) Temporary Pavement Marking Tape – Short Duration
2	(Removable)
3 4	Temporary pavement marking tape for short duration (usage is for up to two months) shall conform to ASTM D4592 Type I except that black tape, black mask tape and the black
5 6	portion of the contrast removable tape, shall be non-reflective.
7	9-34.5(2) Temporary Pavement Marking Tape – Long Duration
8	This section's title is revised to read:
9	This section of this is revised to read.
10	Temporary Pavement Marking Tape – Long Duration (Non-Removable)
11	
12	The first sentence is revised to read:
13	
14	Temporary pavement marking tape for long duration (usage is for greater than two
15	months and less than one year) shall conform to ASTM D4592 Type II.
16 17	ASTM E2176 is deleted from the second sentence.
18	ASTWILE 170 is deleted from the second sentence.
19	9-34.7(1) Requirements
20	The first paragraph is revised to read:
21	
22	Field performance evaluation is required for low VOC solvent-based paint per Section 9-
23	34.2(4), Type A - liquid hot applied thermoplastic per Section 9-34.3(1), Type B -
24	preformed fused thermoplastic per Section 9-34.3(2), Type C – cold applied preformed
25	tape per Section 9-34.3(3), and Type D – liquid applied methyl methacrylate per Section
26 27	9-34.3(4).
28	The last paragraph is deleted.
29	The last paragraph is associati
30	9-34.7(1)C Auto No-Track Time
31	The first paragraph is revised to read:
32	
33	Auto No-Track Time will only be required for low VOC solvent-based paint in accordance
34	with Section 9-34.2(4).
35	

The second and third sentences of the second paragraph are deleted.

# PART 5 SPECIAL PROVISIONS



# **TABLE OF CONTENTS**

1	
2	

3	INTRODUCT	TION TO THE SPECIAL PROVISIONS	1
4	DIVISION 1	GENERAL REQUIREMENTS	2
5	DESCRIP <sup>-</sup>	TION OF WORK	2
6	SECTION	1-01, DEFINITIONS AND TERMS	2
7	1-01.3	Definitions	
8	SECTION	1-02, BID PROCEDURES AND CONDITIONS	4
9	1-02.1	Prequalification of Bidders	
10	1-02.1	Qualifications of Bidder	4
11	1-02.2	Plans and Specifications	
12	1-02.4	Examination of Plans, Specifications, and Site of Work	
13	1-02.5	Proposal Forms	
14	1-02.7	Bid Deposit	
15	1-02.9	Delivery of Proposal	
16		Withdrawing, Revising, or Supplementing Proposal	
17		Public Opening of Proposals	
18	1-02.13	<b>O</b> 1	
19 20	1-02.14	· ·	
		Pre Award Information	
21		1-03, AWARD AND EXECUTION OF CONTRACT	
22	1-03.1	Consideration of Bids	
23	1-03.3	Execution of Contract	
24	1-03.4	Contract Bond	
25		1-04, SCOPE OF THE WORK	15
26	1-04.2	Coordination of Contract Documents, Plans, Special Provisions,	15
27 28	1-04.4	Specifications, and Addenda	
20 29	1-04.4	Variation in Estimated Quantities	
30		1-05, CONTROL OF WORK	
31 32	1-05.3 1-05.7	Plans and Working DrawingsRemoval of Defective and Unauthorized Work	
33	1-05.7		
34	1-05.11	Final Inspections and Operational Testing	
35	1-05.12	·	
36		Superintendents, Labor and Equipment of Contractor	
37	1-05.15		
38	1-05.16	Water and Power	
39	SECTION	1-06, CONTROL OF MATERIAL	21
40	1-06.1	Approval of Materials Prior to Use	
41	1-06.4	Handling and Storing Materials	
42	1-06.6	Recycled Materials	25
43	SECTION	1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBL	IC26
44		Laws to be Observed	

1	1-07.2	State Taxes	26
2	1-07.2	State Sales Tax	26
3	1-07.5	Environmental Regulations	28
4	1-07.16	Protection and Restoration of Property	37
5		Utilities and Similar Facilities	
6	1-07.18	Public Liability and Property Damage Insurance	40
7		Insurance	
8	1-07.23	Public Convenience and Safety	43
9	1-07.24	Rights of Way	45
10	SECTION	1-08, PROSECUTION AND PROGRESS	46
11	1-08.0	Preliminary Matters	
12	1-08.3	Progress Schedule	
13	1-08.4	Prosecution of Work	
14	1-08.9	Liquidated Damages	
15	1-08.10	·	
16	SECTION	1-09, MEASUREMENT AND PAYMENT	51
17	1-09.3	Scope of Payment	
18	1-09.6	Force Account	
19	1-09.9	Payments	
20	1-09.11	Disputes and Claims	
21		Claims Resolution	
22		1-10, TEMPORARY TRAFFIC CONTROL	
23	1-10.1	General	
24	1-10.2	Traffic Control Management	
25	1-10.4	Measurement	
26	1-10.5	Payment	
_ · 27		MISCELLANEOUS CONSTRUCTION	
28 29		8-20, ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, INTELLIGENT TATION SYSTEMS, AND ELECTRICAL	50
29 30		Description	
31		) Regulations and Code	
32	•	/ regulations and code	
33		) Equipment List and Drawings	
34	•	Construction Requirements	
35		) General	
36	•	)A Electrical Equipment Removals	
37	•	)B Contracting Agency/Operations Agency Owned Equipment	
38		)C Contractor Owned Removals	
39	•	B) Wiring	
40	•	B) Wire Labels	
<del>4</del> 0	•	) Bonding, Grounding	
<del>4</del> 1	`	Payment	
43		MATERIALS	
44 45		9-29, ILLUMINATION, SIGNAL, AND ELECTRICAL	
45	9-29.2( I	)A1 Concrete Junction Boxes	ნპ

1	9-29.3(2)B Multi-Conductor Cable 63	3
2	9-29.16(2)A Optical Units63	3
	APPENDICES	
4		
5		

### INTRODUCTION TO THE SPECIAL PROVISIONS

(August 14, 2013 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2018 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by the Amendments to the Standard Specifications and these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The project-specific Special Provisions are not labeled as such. The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP) (April 1, 2013 WSDOT GSP) (May 1, 2013 City of Sammamish)

Also incorporated into the Contract Documents by reference are:

Design and Construction Standards

 Manual on Uniform Traffic Control Devices for Streets and Highways, currently adopted edition, with Washington State modifications, if any
 Standard Plans for Poad, Bridge and Municipal Construction, WSDOT/APWA

  Standard Plans for Road, Bridge and Municipal Construction, WSDOT/APWA, current edition

CITY OF SAMMAMISH 2016 Sammamish Public Works Standards
 KING COUNTY Department of Transportation Road Services Division 2007

 Contractor shall obtain copies of these publications, at Contractor's own expense.

1 2 3	DIVISION 1 GENERAL REQUIREMENTS
4	DESCRIPTION OF WORK
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	This Contract provides for the installation and improvement of Flashing Yellow Arrow (FYA left-turn signalization at ten (10) intersections within the City of Sammamish, King County  NE 8th Street & 242nd Avenue NE (Eastbound and Westbound)  228th Avenue NE / NE 4th Street (Northbound)  228th Avenue SE / SE 8th Street (Southbound) [Non-Peak Hours Only]  Revising Eastbound and Westbound to split phase (no FYA)  SE Duthie Hill Road / Trossachs Boulevard SE / 275th Ave SE - All approaches (Northbound, Southbound, Eastbound, and Westbound)  Issaquah-Pine Lake Road SE / 230th Lane SE / Pine Lake Middle Schoo (Northbound and Southbound)  Issaquah-Pine Lake Road SE / SE Klahanie Boulevard (Northbound and Southbound)  SE Issaquah-Pine Lake Road SE / SE Duthie Hill Road (Eastbound)  SE Issaquah-Pine Lake Road SE / SE 47th Way / 238th Way SE (Northbound and Southbound)  Issaquah-Pine Lake Road SE / SE 48th Street (Northbound)  The project includes removal of existing equipment, installation of new signal controllers a new signal cabinet, new signal conductors, new conflict monitors, new 3- and 4-sectior signal heads with LED displays, signing associated with FYA operations, traffic control and other work noted in these documents.  SECTION 1-01, DEFINITIONS AND TERMS
29 30	1-01.3 Definitions (January 4, 2016 APWA GSP)
31 32 33	Delete the heading <b>Completion Dates</b> and the three paragraphs that follow it, and replace them with the following:
34 35	Dates
36 37 38	Bid Opening Date The date on which the Contracting Agency publicly opens and reads the Bids.  Award Date
39 40	The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.
41 42	Contract Execution Date  The date the Contracting Agency officially binds the Agency to the Contract.
43 44	Notice to Proceed Date  The date stated in the Notice to Proceed on which the Contract time begins.

### 1 Substantial Completion Date

The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

### **Physical Completion Date**

The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

### **Completion Date**

The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

### Final Acceptance Date

The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications, Amendments, or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to "State Materials Laboratory" shall be revised to read "Contracting Agency designated location".

All references to "final contract voucher certification" shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

### **Additive**

A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

#### **Alternate**

One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

### 1 Business Day

A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

### **Contract Bond**

The definition in the Standard Specifications for "Contract Bond" applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

### **Contract Documents**

See definition for "Contract".

### **Contract Time**

The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

### **Notice of Award**

The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency's acceptance of the Bid Proposal.

### **Notice to Proceed**

The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

### **Traffic**

Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

### **SECTION 1-02, BID PROCEDURES AND CONDITIONS**

# 1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

### 1-02.1 Qualifications of Bidder

35 (January 24, 2011 APWA GSP) 

Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

### 1-02.2 Plans and Specifications

(June 27, 2011 APWA GSP)

Delete this Section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed will be found in the Call for Bids (Advertisement for Bids) for the Work.

After award of the Contract, Plans and Specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	3	Furnished automatically upon award.
Contract Provisions	3	Furnished automatically upon award.

Additional Plans and Contract Provisions may be purchased by the Contractor by payment of the cost stated in the Call for Bids.

### 1-02.4 Examination of Plans, Specifications, and Site of Work

## 1-02.4(1) General

 (June 2006 City of Sammamish)

 Section 1-02.4(1) General numbered paragraph 3 is replaced with the following:

Has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered <u>including existing utilities</u> and <u>utility relocation Work</u> insofar as this information is reasonably ascertainable from an inspection of the Work site (including material sites) as well as from the Bid Documents and other information made a part of this Contract.

# 1-02.5 Proposal Forms

(July 31, 2017 APWA GSP)

Delete this Section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder's name, address, telephone number, and signature; the bidder's UDBE/DBE/M/WBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

### 1-02.6 Preparation of Proposal

1 2 3

Supplement the second paragraph with the following:

  If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

 5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last two paragraphs, and replace them with the following:

If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use any Subcontractor to perform those items of work.

 The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

### 1-02.7 Bid Deposit

(March 8, 2013 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

 Contracting Agency-assigned number for the project;
 Name of the project;

3. The Contracting Agency named as obligee;

  The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;

5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the

- signature on the bond, and the title of the person must accompany the said signature:
- 6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

### 1-02.9 Delivery of Proposal

(May 17, 2018 APWA GSP, Option A)

Delete this section and replace it with the following:

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

To be considered responsive on a FHWA-funded project, the Bidder may be required to submit the following items, as required by Section 1-02.6:

- UDBE Written Confirmation Document from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification (WSDOT 272-056U)
- Good Faith Effort (GFE) Documentation

These documents, if applicable, shall be received either with the Bid Proposal or as a supplement to the Bid. These documents shall be received **no later than 24 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

If submitted after the Bid Proposal is due, the document(s) must be submitted in a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added. All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (UDBE confirmations, or GFE documentation) that is received after the time specified above, or received in a location other than that specified in the Call for Bids.

# **1-02.10** Withdrawing, Revising, or Supplementing Proposal (July 23, 2015 APWA GSP)

Delete this section in its entirety, and replace it with the following:

 After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

- 1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
- 2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
- 3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, Emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

### 1-02.12 Public Opening of Proposals

Section 1-02.12 is supplemented with the following:

# Date of Opening Bids

Sealed Bids are to be received at one of the following locations prior to the time specified:

1. At Sammamish City Hall until **2:00 p.m.** of the Bid opening date.

Sammamish City Hall 801 228th Avenue SE Sammamish, WA 98075

The Bid opening date for this project is as specified on the Notice to Contractors. Bids received will be publicly opened and read after **2:00 p.m.** on this date.

### 1-02.13 Irregular Proposals

(June 20, 2017 APWA GSP)

Delete this section and replace it with the following:

- 1. A Proposal will be considered irregular and will be rejected if:
  - a. The Bidder is not prequalified when so required;
  - b. The authorized Proposal form furnished by the Contracting Agency is not used or is altered;
  - c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;

- 1 d. The Bidder adds provisions reserving the right to reject or accept the 2 award, or enter into the Contract; 3 e. A price per unit cannot be determined from the Bid Proposal; 4 f. The Proposal form is not properly executed; 5 The Bidder fails to submit or properly complete a Subcontractor list, if q. 6 applicable, as required in Section 1-02.6;
  - h. The Bidder fails to submit or properly complete an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
  - i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
  - j The Bidder fails to submit UDBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
  - k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
  - I. More than one Proposal is submitted for the same project from a Bidder under the same or different names.
  - 2. A Proposal may be considered irregular and may be rejected if:
    - a. The Proposal does not include a unit price for every Bid item;
    - Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
    - Receipt of Addenda is not acknowledged;
    - d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
    - e. If Proposal form entries are not made in ink.

### 1-02.14 Disqualification of Bidders

(May 17, 2018 APWA GSP, Option B)

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet Supplemental Criteria 1-7 listed in this Section.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-7 shall be provided by the Bidder as stated later in this Section.

### 1. **Delinquent State Taxes**

48 49 50

51

47

7

8

9

10

11

12

13

14

15

16

17 18

19

20

21

22

23 24

25

26

27

28

29

30

31

32

33

34 35

36

37 38

39 40

41

42

43 44

- A <u>Criterion</u>: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.
- B. <u>Documentation</u>: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder does not owe delinquent taxes to the Washington State Department of Revenue, or if delinquent taxes are owed to the Washington State Department of Revenue, the Bidder must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

### 2. Federal Debarment

- A <u>Criterion</u>: The Bidder shall not currently be debarred or suspended by the Federal government.
- B. <u>Documentation</u>: The Bidder shall not be listed as having an "active exclusion" on the U.S. government's "System for Award Management" database (www.sam.gov).

### 3. Subcontractor Responsibility

- A <u>Criterion</u>: The Bidder's standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder's subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also "responsible" subcontractors as defined by RCW 39.06.020.
- B. <u>Documentation</u>: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

### 4. Claims Against Retainage and Bonds

- A <u>Criterion</u>: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. <u>Documentation</u>: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:

- Name of project
- · The owner and contact information for the owner;
- A list of claims filed against the retainage and/or payment bond for any of the projects listed;
- A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

### 5. Public Bidding Crime

- A <u>Criterion</u>: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.
- B. <u>Documentation</u>: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

### 6. Termination for Cause / Termination for Default

- A <u>Criterion</u>: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. <u>Documentation</u>: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances.

### 7. Lawsuits

- A <u>Criterion</u>: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency
- B. <u>Documentation</u>: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Contracting Agency shall evaluate these explanations to determine

whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts

As evidence that the Bidder meets the Supplemental Criteria stated above, the apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets the supplemental criteria together with supporting documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with the Supplemental Criteria. The Contracting Agency reserves the right to request further documentation as needed from the low Bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may consider mitigating factors in determining whether the Bidder complies with the requirements of the supplemental criteria.

The basis for evaluation of Bidder compliance with these mandatory and supplemental criteria shall include any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from others for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Contracting Agency which is believed to be relevant to the matter.

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

 Request to Change Supplemental Bidder Responsibility Criteria Prior To Bid: Bidders with concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria may make or submit requests to the Contracting Agency to modify the criteria. Such requests shall be in writing, describe the nature of the concerns, and propose specific modifications to the criteria. Bidders shall submit such requests to the Contracting Agency no later than five (5) business days prior to the bid submittal deadline and address the request to the Project Engineer or such other person designated by the Contracting Agency in the Bid Documents.

### 1-02.15 Pre Award Information

(August 14, 2013 APWA GSP)

Revise this section to read:

 Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

- 1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
- 2. Samples of these materials for quality and fitness tests,
- 3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
- 4. A breakdown of costs assigned to any bid item,
- 5. Attendance at a conference with the Engineer or representatives of the Engineer,
- 6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
- 7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

# **SECTION 1-03, AWARD AND EXECUTION OF CONTRACT**

### 1-03.1 Consideration of Bids

(January 23, 2006 APWA GSP)

Revise the first paragraph to read:

After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. If a minimum bid amount has been established for any item and the bidder's unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the Contracting Agency, will be used by the Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the amount of the contract bond.

### 1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this Section to read:

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful Bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 10 calendar days after the award date, the successful Bidder shall return the signed Contracting Agency-prepared Contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the Contract by the Contracting Agency, the successful Bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a Contract, no Proposal shall bind the Contracting Agency nor shall any Work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any Work begun outside such areas and for any materials ordered before the Contract is executed by the Contracting Agency.

If the Bidder experiences circumstances beyond their control that prevents return of the Contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 10 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

### 1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

- 1. Be on Contracting Agency-furnished form(s);
- 2. Be signed by an approved surety (or sureties) that:
  - a. Is registered with the Washington State Insurance Commissioner, and
  - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
- 3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
  - a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
  - b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
- 4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
- 5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and

6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

(June 2006 City of Sammamish)
Section 1-03.4 is supplemented with the following:

The Contractor shall furnish both a Performance Bond and a Labor and Material Payment Bond, each in the full amount of the Contract price which shall guarantee the faithful performance of the Contract and the payment for all taxes, labor, material, Subcontractors and material suppliers. The Labor and Material Payment Bond shall

Subcontractors and material suppliers. The Labor and Material Payment Bond shall be in force until completion of the project and acceptance by the Contracting Agency, and also for such period thereafter during which the law allows claims to be filed and sued upon. All Bonds required hereunder shall be issued by a corporate surety company authorized to do business in the state in which the Work is located, and which is also a company acceptable to the Contracting Agency, and on the form

### 1-03.7 Judicial Review

attached hereto.

(November 30, 2018 APWA GSP)

Revise this section to read:

Any decision made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

### **SECTION 1-04, SCOPE OF THE WORK**

# 1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

(March 13, 2012 APWA GSP)

### REVISE THE SECOND PARAGRAPH TO READ:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

- Addenda,
  - 2. Proposal Form,
  - 3. Special Provisions,
- Contract Plans.
  - 5. Amendments to the Standard Specifications,
  - 6. Standard Specifications,
  - 7. Contracting Agency's Standard Plans or Details (if any), and
  - 8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

# 1-04.4 **Changes**

Delete the fifth paragraph and replace with the following:

B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original Contract quantity, <u>and</u> if the Item of Work represents more than 10 percent of the total Contract price. For the purpose of this Section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.

### 1-04.6 Variation in Estimated Quantities

(July 23, 2015 APWA GSP, Option A)

Revise the first paragraph to read:

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of any Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original Proposal quantity, and if the total extended bid price for that item at time of award is equal to or greater than \$25,000. In that case, payment for contract work may be adjusted as described herein.

# **SECTION 1-05, CONTROL OF WORK**

# 1-05.3 Plans and Working Drawings

# 1-05.3(1) Record Drawings (New Section)

 (June 2006 City of Sammamish)

Section 1-05.3(1) is added as follows:

Record drawings refer to those documents to be maintained and annotated by the Contractor during construction and are defined as (1) a neatly and legibly marked set of Contract Plans showing the final location of piping, new structures, paving limits, curbs, gutters, sidewalks, relocated utility structures, monuments, signal equipment, channelization, etc.; (2) additional documents such as schedules, lists, drawings, and easement/permit forms included in the specifications; and (3) Contractor layout and installation drawings.

Unless otherwise specified, record drawings shall be half size (11" x 17") and maintained in a clean, dry, and legible condition. Record documents shall not be used for construction purposes and shall be available for review by the Engineer during normal working hours at the Contractor's field office. At the completion of the Work, prior to final payment, all record drawings and attachments shall be submitted to the Engineer. This Work does not require a field survey of "as-built" conditions.

Marking of the drawings shall be kept current and shall be done at the time materials and equipment are installed. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:

Additions Red
Deletions Green
Comments - Blue
Dimensions - Graphite

Legibly mark to record actual depths, horizontal and vertical location of underground utilities and cables, and appurtenances referenced to permanent surface improvements.

 The Contractor will be provided with one set of blueprint construction drawings for this purpose. At the end of the project, each record drawing shall be signed by a person with authority to represent the Contractor, attesting to the accuracy of the drawing.

The Contractor's record drawings will be reviewed bi-monthly for completeness by the Resident Engineer. If the record drawings do not reflect the Work performed, payment for those items of Work not reflected on the drawings will not be included in the current monthly progress estimate.

### **Payment**

Payment will be made in accordance with Section 1-04.1 for the following bid item when included in the Proposal:

"Record Drawings," lump sum.

# 1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this Section with the following:

If the Contractor fails to remedy defective or unauthorized Work within the time specified in a written notice from the Engineer, or fails to perform any part of the Work required by the Contract Documents, the Engineer may correct and remedy such Work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized Work corrected immediately, have the rejected Work removed and replaced, or have Work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized Work, or Work the Contractor failed or

9 10 11

12

8

13 14 15

16 17 18

20 21 22

23

24

25

19

31

38

44 45 46

43

47 48

refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of Work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized Work.

No adjustment in Contract time or compensation will be allowed because of the delay in the performance of the Work attributable to the exercise of the Contracting Agency's rights provided by this Section.

The rights exercised under the provisions of this Section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the Work as required.

#### 1-05.11 **Final Inspection** Delete this Section and replace it with the following:

#### 1-05.11 **Final Inspections and Operational Testing**

(October 1, 2005 APWA GSP)

### 1-05.11(1) Substantial Completion Date

When the Contractor considers the Work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of Work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the Work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the Work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the Work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefore.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the Work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the Work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the Work physically complete and ready for final inspection.

### 1-05.11(2) Final Inspection and Physical Completion Date

When the Contractor considers the Work physically complete and ready for final inspection, the Contractor by written notice, shall request the Engineer to schedule a final inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the Work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective Work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of Contract time because of a delay in the performance of the Work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the Work was considered physically complete. That date shall constitute the Physical Completion Date of the Contract, but shall not imply acceptance of the Work or that all the obligations of the Contractor under the Contract have been fulfilled.

### 1-05.11(3) Operational Testing

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore when the Work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar Work it may be desirable for the Engineer to have the Contractor operate and test the Work for a period of time after final inspection but prior to the physical completion date. Whenever items of Work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of Workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit Contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

1-05.12 Final Acceptance

Add the following new section:

# 1-05.12(1) One-Year Guarantee Period

(March 8, 2013 APWA GSP)

The Contractor shall return to the project and repair or replace all defects in workmanship and material discovered within one year after Final Acceptance of the Work. The Contractor shall start work to remedy any such defects within 7.

the Work. The Contractor shall start work to remedy any such defects within 7 calendar days of receiving Contracting Agency's written notice of a defect, and shall complete such work within the time stated in the Contracting Agency's notice. In case of an emergency, where damage may result from delay or where loss of services may result, such corrections may be made by the Contracting Agency's own forces or another contractor, in which case the cost of corrections shall be paid by the Contractor. In the event the Contractor does not accomplish corrections within the time specified, the work will be otherwise accomplished and the cost of same shall be paid by the Contractor.

Operational and test periods, when required by the Engineer, shall not affect a

manufacturer's quaranties or warranties furnished under the terms of the Contract.

When corrections of defects are made, the Contractor shall then be responsible for correcting all defects in workmanship and materials in the corrected work for one year after acceptance of the corrections by Contracting Agency.

This guarantee is supplemental to and does not limit or affect the requirements that the Contractor's work comply with the requirements of the Contract or any other legal rights or remedies of the Contracting Agency.

1-05.13 Superintendents, Labor and Equipment of Contractor (August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

# 1-05.13(1) Emergency Contact List

(June 2006 City of Sammamish)

Section 1-05.13(1) shall be supplemented with the following:

The Contractor shall designate and shall provide the Contracting Agency and the Engineer with names and telephone numbers of those persons who will be available at all times in case of emergency. The Contractor will be charged for such expenses as may be incurred by the Contracting Agency to provide such service, if said emergency is not immediately rectified.

### 1-05.15 Method of Serving Notices

(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

# Add the following new Section:

# **1-05.16** Water and Power (October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the Work, unless the Contract includes power and water as a pay item.

All correspondence from the Contractor shall be directed to the Project Engineer. All

correspondence from the Contractor constituting any notification, notice of protest,

notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail

delivery service to the Project Engineer's office. Electronic copies such as e-mails or

### **SECTION 1-06, CONTROL OF MATERIAL**

### 1-06.1 Approval of Materials Prior to Use

(June 2006 City of Sammamish)

Section 1-06.1 is supplemented with the following:

 Within these Contract Documents, certain items are specified by brand, style, trade name, or manufacturer in order to set forth a standard of quality, and/or preference by the Contracting Agency. It is not the intent of these Specifications to exclude other processes or materials of a type and quality equal to those designated.

2. Whenever a manufacturer's name, brand, or item designation is given, it shall be understood that the words "or equal" follow such name or designation whether in fact they do so or not.

3. The phrase "or equal" is not to be construed to mean that material or equipment will be necessarily approved as equal by the Engineer; any such approval shall only be effective when the item has been specifically approved in advance and in writing by the Engineer.

4. No additional compensation or extension of time will be allowed the Contractor for any changes required to adopt substituted materials or equipment.

# 1-06.1(5) Submittals (New Section)

 (June 2006 City of Sammamish)

 Section 1-06.1(5) is added as follows:

1-06.1(5)1.0 General

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of Work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the requirements of the Specifications and drawings. Submittal documents shall be clearly edited to indicate only those items, models, or series of materials or equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and specifically notify the Contracting Agency in each case where his/her submittal may affect the Work of another Contractor or the Contracting Agency. The Contractor shall ensure coordination of submittals among the related crafts and sub-Contractors. If the Contractor proposes to provide material, equipment, or method of Work, which deviates from the project Specifications, the Contractor shall indicate so under "deviations" on the transmittal form accompanying the submittal copies.

### 1-06.1(5)1.1 Work Included

Submittals required for this Work shall include any or all of the following as required by the particular Specification section and the submittal schedule:

- a. Manufacturer's Literature
- b. Shop Drawings
- c. Material Samples
- d. Test Report

### 1-06.1(5)1.2 Submittal Information

Shop, catalog, and other appropriate drawings shall be submitted to the Engineer for review prior to fabrication or ordering of all equipment or materials specified. The number of copies of submittal information to be submitted shall be as indicated in the following parts of this Section.

All submittal information shall be sent to the Contracting Agency or the Agency's designated representative through the general Contractor.

### 1-06.1(5)2.0 Product Submittals

### 1-06.1(5)2.1 General

Each submittal shall be accompanied by a letter of transmittal showing the date of transmittal, Specification section or drawing number to which the submittal pertains, and a brief description of the material submitted.

When the Contract documents require a submittal, the Contractor shall submit the specified information as follows:

1. One (1) reproducible original and five (5) copies of all the submitted information.

2. The original and three (3) copy sets will be retained for Contracting Agency and Engineer records. Two (2) copy sets will be returned to the Contractor with the approval action noted.

### 1-06.1(5)2.2 Manufacturer's Literature

Where the contents of submitted literature includes data is not pertinent to the submittal, the portion(s) of the contents being submitted for the Engineer's review shall be clearly indicated.

### 1-06.1(5)2.3 Shop Drawings

Shop Drawings shall be submitted in the form of blue-line or black-line prints of each sheet. Blueprint submittals will not be acceptable.

All Shop Drawings shall be accurately drawn to a scale sufficiently large enough to show pertinent features and method of connection or joining. On all Shop Drawings, figure dimensions shall be used as opposed to scaled dimensions.

Shop Drawings shall bear the Contractor's certification that it has reviewed, checked, and approved the Shop Drawings.

### 1-06.1(5)2.4 Material Samples

All material samples shall be of the exact article proposed to be furnished and shall be submitted in the quantity required to be returned to the Contractor, plus one additional sample to be retained by the Engineer.

### 1-06.1(5)2.5 Test Reports

A minimum of four (4) copies of test reports shall be submitted to the Contracting Agency and/or its designated representative.

### 1-06.1(5)2.6 Resubmittals

When material is resubmitted for any reason, it shall be resubmitted under a new letter of transmittal and referenced to the previous submittal.

### 1-06.1(5)2.7 Timing of Product Submittals

### 1-06.1(4)2.7.1 General

- 1. All submittals shall be made far enough in advance of installation to provide all required time for reviews and securing of necessary approvals.
- 2. In scheduling, the Contractor shall allow at least twenty (20) calendar days for the Engineer's review following its receipt of the submittal.
- 3. A minimum of six (6) copies are required for submittal (Shop Drawings, manufacturer's literature, etc.) four (4) copies will be retained by the Engineer. The remaining copies will be returned to the Contractor.

### 1-06.1(5)2.7.2 Delays

Cost of delays occasioned by tardiness of submittals on the part of the Contractor will not be borne by the Contracting Agency, or the Engineer.

### 1-06.1(5)2.8 Substitutions

### 1-06.1(5)2.8.1 General

- 1. Wherever possible throughout the Specifications, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number, by reference to recognized industry standards, or by performance requirements.
- 2. To ensure that the specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of design data and for review and approval or rejection by the Engineer.

### 1-06.1(5)2.8.2 Engineer's Review Required

- 1. Comply with the requirements of the Standard Specifications unless modified herein.
- The Engineer will consider proposals for substitutions of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Engineer to evaluate the proposals.
- 3. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this Work by the Engineer.
- 4. If the Contractor desires to furnish items of minor equipment by manufacturers other than those specified, he shall secure the approval of the Engineer prior to placing a purchase order.
- 5. Where the phrase "or equal" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Engineer unless the item has been specifically approved in writing for this Work by the Engineer.

### 1-06.1(5)2.8.3 Availability of Specified Items

- 1. Verify prior to Bidding that all specified items will be available in time for installation during orderly and timely progress of the Work.
- 2. In the event the specified item or items will not be available, notify the Engineer prior to receipt of Bids.
- Costs of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, shall not be borne by the Contracting Agency. Under such conditions, the Contractor is subject to liquidated damages should Contract time expire.

### 1-06.1(5)3.0 Payment

No separate payment will be made for submittals or equipment manuals, or the corresponding services, and operations required by the Contractor to complete the furnishing of equipment information in accordance with these Specifications. All costs shall be considered as incidental to the Work.

# 1-06.4 Handling and Storing Materials

## 1-06.4(1) On-Site Storage (New Section)

(June 2006 City of Sammamish)

Section 1-06.4(1) is added as follows:

The Contractor shall store all equipment and materials in a safe and suitable place in accordance with the Manufacturer's recommendations. Materials shall be covered or wrapped to protect them from moisture, dust and deterioration as required. All on-site storage areas shall be approved in advance by the Engineer.

## 1-06.4(2) Off-Site Storage (New Section)

(June 2006 City of Sammamish)

Section 1-06.4(2) is added as follows:

The Contractor may be required to provide off-site storage of equipment and materials to enable construction to occur at the construction site. The Contractor has full responsibility to secure all off-site storage areas, if needed, and shall include the costs for providing such storage areas in the Contract Bid Proposal for the individual equipment and material items requiring offsite storage. All off-site storage areas shall be fenced, secure and have access restricted or withheld from the General Public.

### 1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT form 350-075 Recycled Materials Reporting.

# 1 SECTION 1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

### 1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this Section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well-known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to Work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the Work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

### 1-07.2 State Taxes

Delete this Section, including its sub-sections, in its entirety and replace it with the following:

### 1-07.2 State Sales Tax

(June 27, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

10

11 12

13

14

15

16

17 18

# Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171 WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

The Contracting Agency will pay the retained percentage (or release the Contract

Bond if a FHWA-funded Project) only if the Contractor has obtained from the

Washington State Department of Revenue a certificate showing that all contractrelated taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct

from its payments to the Contractor any amount the Contractor may owe the

19 20 21

22

23

24

25

26

27

28

29

30

## 1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

31 32 33

34

35

36

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

37 38 39

40

41

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

42 43 44

# 1-07.2(3) Services

45 46 47 The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

## 1-07.5 Environmental Regulations

## 1-07.5(1) General

 (June 2006 City of Sammamish)

Supplement this Section with the following:

The Contractor's attention is directed to Section 1-07.5 in its entirety, in addition to the following. The Contractor shall provide for the flow of all watercourses, including streams, ditches, drains, and sewers intercepted during the progress of the Work and shall completely restore the same in as good condition as found or shall make such final provisions for restoration as the Contracting Agency may require. The Contractor shall not obstruct the flow of water but shall use all proper measures to provide for the free passage of surface water.

The Contractor shall make provisions to take care of all surplus water, mud, silt, slickings, or other runoff pumped from excavations or resulting from sluicing or other operations and shall be responsible for any damage of whatever nature resulting from failure to provide for the adequate control of runoff.

No direct payment shall be allowed for the above Work. Payment for the cost thereof shall be included in the prices Bid for the various items which comprise the Contract Work.

(June 8, 2017 APWA GSP, Option A)

## 1-07.11 Requirements for Nondiscrimination

**Participation** 

(April 3, 2018 WSDOT GSP)

# 1-07.11.OPT2.GR1 Disadvantaged Business Enterprise (DBE)

# Disadvantaged Business Enterprise Participation

The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 and USDOT's official interpretations (i.e., Questions & Answers) apply to this Contract. As such, the requirements of this Contract are to make affirmative efforts to solicit DBEs, provide information on who submitted a Bid or quote and to report DBE participation monthly as described elsewhere in these Contract Provisions. No preference will be included in the evaluation of Bids/Proposals, no minimum level of DBE participation shall be required as a Condition of Award and Bids/Proposals may not be rejected or considered non-responsive on that basis.

### **DBE Abbreviations and Definitions**

**Broker** – A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract, or, persons/companies who arrange or expedite transactions.

**Certified Business Description** – Specific descriptions of work the DBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.

**Certified Firm Directory** – A database of all Minority, Women, and Disadvantaged Business Enterprises. The on-line Directory is available to Contractors for their use in identifying and soliciting interest from DBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page at: https://omwbe.diversitycompliance.com.

### **Commercially Useful Function (CUF)**

49 CFR 26.55(c)(1) defines commercially useful function as: "A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors."

**Contract** – For this Special Provision only, this definition supplements Section 1-01.3. 49 CFR 26.5 defines contract as: "... a legally binding relationship obligating a seller to furnish supplies or services (including, but not limited to, construction and professional services) and the buyer to pay for them. For purposes of this part, a lease is considered to be a contract."

**Disadvantaged Business Enterprise (DBE)** – A business firm certified by the Washington State Office of Minority and Women's Business Enterprises, as meeting the criteria outlined in 49 CFR 26 regarding DBE certification. A Underutilized Disadvantaged Business Enterprise (UDBE) firm is a subset of DBE.

**Force Account Work** – Work measured and paid in accordance with Section 1-09.6.

**Manufacturer (DBE)** – A DBE firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the Contract. A DBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

**Regular Dealer (DBE)** – A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and

15 16 17

18

19

14

20 21 22

23

24 25

> 32 33 34

31

40 41 42

43

39

44 45 46

47 48 49

50 51

regularly sold to the public in the usual course of business. To be a Regular Dealer, the DBE firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in guestion. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.

### **DBE Goals**

No DBE goals have been assigned as part of this Contract.

### Affirmative Efforts to Solicit DBE Participation

The Contractor shall not discriminate on the grounds of race, color, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. DBE firms shall have an equal opportunity to compete for subcontracts in which the Contractor enters into pursuant to this Contract.

### Contractors are encouraged to:

- 1. Advertise opportunities for Subcontractors or suppliers in a timely and reasonably designed manner to provide notice of the opportunity to DBEs capable of performing the Work. All advertisements should include a Contract Provision encouraging participation by DBE firms. This may be accomplished through general advertisements (e.g. newspapers, journals, etc.) or by soliciting Bids/Proposals directly from DBEs.
- Establish delivery schedules that encourage participation by DBEs and other small businesses.
- 3. Participate with a DBE as a joint venture.

### DBE Eligibility/Selection of DBEs for Reporting Purposes Only

Contractor may take credit for DBEs utilized on this Contract only if the firm is certified for the Work being performed, and the firm performs a commercially useful function (CUF).

Absent a mandatory goal, all DBE participation that is attained on this project will be considered as "race neutral" participation and shall be reported as such.

### **Crediting DBE Participation**

All DBE Subcontractors shall be certified before the subcontract on which they are participating is executed.

Be advised that although a firm is listed in the directory, there are cases where the listed firm is in a temporary suspension status. The Contractor shall review

the OMWBE Suspended DBE Firms list. A DBE firm that is included on this list may not enter into new contracts that count towards participation.

DBE participation is only credited upon payment to the DBE.

The following are some definitions of what may be counted as DBE participation.

### **DBE Prime Contractor**

Only take credit for that portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work that the DBE Prime Contractor performs with its own forces and is certified to perform.

### **DBE Subcontractor**

Only take credit for that portion of the total dollar value of the subcontract equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces. The value of work performed by the DBE includes the cost of supplies and materials purchased by the DBE and equipment leased by the DBE, for its work on the contract. Supplies, materials or equipment obtained by a DBE that are not utilized or incorporated in the contract work by the DBE will not be eligible for DBE credit.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor's resources available to DBE subcontractors at no cost, shall not be credited.

DBE credit will not be given in instances where the equipment lease includes the operator. The DBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the DBE, but payment is deducted from the Contractor's payment to the DBE is not allowed.

If a DBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be credited only if the DBE's Lower-Tier Subcontractor is also a DBE. Work subcontracted to a non-DBE shall not be credited.

Count expenditures toward race/gender-neutral participation only if the DBE is performing a CUF on the contract.

### **DBE Subcontract and Lower Tier Subcontract Documents**

There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the DBE. The subcontract agreement shall incorporate requirements of the primary Contract. Subcontract agreements of all tiers, including lease agreements shall be readily available at the project site for the Engineer review.

### **DBE Service Provider**

The value of fees or commissions charged by a DBE Broker, a DBE behaving in a manner of a Broker, or another service provider for providing

a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited as DBE participation, if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF.

### **Temporary Traffic Control**

If the DBE firm is being utilized in the capacity of only "Flagging", the DBE firm must provide a Traffic Control Supervisor (TCS) and flagger, which are under the direct control of the DBE. The DBE firm shall also provide all flagging equipment (e.g. paddles, hard hats, and vests).

If the DBE firm is being utilized in the capacity of "Traffic Control Services", the DBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project. In addition, if the DBE firm utilizes the Contractor's equipment, such as Transportable Attenuators and Portable Changeable Message Signs (PCMS) no DBE credit can be taken for supplying and operating the items.

### **Trucking**

DBE trucking firm participation may only be credited as DBE participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier. In situations where the DBE's work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine DBE credit for hauling.

The DBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The DBE receives credit for the value of the transportation services it provides on the Contract using trucks it owns or leases, licenses, insures, and operates with drivers it employs.

The DBE may lease additional trucks from another DBE firm. The Work that a DBE trucking firm performs with trucks it leases from other certified DBE trucking firms qualify for 100% DBE credit

The trucking Work subcontracted to any non-DBE trucking firm will not receive credit for Work done on the project. The DBE may lease trucks from a non-DBE truck leasing company, but can only receive credit as DBE participation if the DBE uses its own employees as drivers.

DBE credit for a truck broker is limited to the fee/commission that the DBE receives for arranging transportation services.

Truck registration and lease agreements shall be readily available at the project site for the Engineer review.

## **DBE Manufacturer and DBE Regular Dealer**

One hundred percent (100%) of the cost of the manufactured product obtained from a DBE Manufacturer can count as DBE participation.

Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited as DBE participation. If the role of the DBE Regular Dealer is determined to be that of a pass-through, then no DBE credit will be given for its services. If the role of the DBE Regular Dealer is determined to be that of a Broker, then DBE credit shall be limited to the fee or commission it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract-by-Contract basis.

Regular Dealer DBE firms must be approved before being used on a project. The WSDOT Approved Regular Dealer list published on WSDOT's Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. The Regular Dealer must submit the Regular Dealer Status Request form a minimum of five days prior to being utilized on the specific project.

Purchase of materials or supplies from a DBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can count as DBE participation provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the DBE. The cost of the materials and supplies themselves cannot be counted toward as DBE participation.

Note: Requests to be listed as a Regular Dealer will only be processed if the requesting firm is a material supplier certified by the Office of Minority and Women's Business Enterprises in a NAICS code that falls within the 42XXXX NAICS Wholesale code section.

#### **Procedures Between Award and Execution**

After Award and prior to Execution, the Contractor shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder's Proposal bond or deposit.

1. A list of all firms who submitted a bid or quote in attempt to participate in this project whether they were successful or not. Include the business name and mailing address.

Note: The firms identified by the Contractor may be contacted by the Contracting Agency to solicit general information as follows: age of the firm and average of its gross annual receipts over the past three-years.

#### **Procedures After Execution**

## Commercially Useful Function (CUF)

The Contractor may only take credit for the payments made for Work performed by a DBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the DBE. This applies to all DBEs performing Work on a project, whether or not the DBEs are COA, if the Contractor wants to receive credit for their participation. The Engineer will conduct CUF reviews to ascertain whether DBEs are performing a CUF. A DBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The DBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a DBE does not perform "all" of these functions on a furnish-and-install contract, it has not performed a CUF and the cost of materials cannot be counted toward UDBE COA Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be readily available for review by the Engineer.

In order for a DBE traffic control company to be considered to be performing a CUF, the DBE must be in control of its work inclusive of supervision. The DBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of DBE participation.

The following are some of the factors that the Engineer will use in determining whether a DBE trucking company is performing a CUF:

- The DBE shall be responsible for the management and supervision
  of the entire trucking operation for which it is responsible on the
  Contract. The owner demonstrates business related knowledge,
  shows up on site and is determined to be actively running the
  business.
- The DBE shall with its own workforce, operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the DBE must be exclusively employed by the DBE and reflected on the DBE's payroll.
- Lease agreements for trucks shall indicate that the DBE has exclusive use of and control over the truck(s). This does not preclude the leased truck from working for others provided it is with the consent of the DBE and the lease provides the DBE absolute priority for use of the leased truck.
- Leased trucks shall display the name and identification number of the DBE.

#### **Joint Checking**

A joint check is a check between a Subcontractor and the Contractor to the supplier of materials/supplies. The check is issued by the Contractor as payer to the Subcontractor and the material supplier jointly for items to be incorporated into the project. The DBE must release the check to the supplier, while the Contractor acts solely as the guarantor.

A joint check agreement must be approved by the Engineer and requested by the DBE involved using the DBE Joint Check Request Form (form # 272-053) prior to its use. The form must accompany the DBE Joint Check Agreement between the parties involved, including the conditions of the arrangement and expected use of the joint checks.

The approval to use joint checks and the use will be closely monitored by the Engineer. To receive DBE credit for performing a CUF with respect to obtaining materials and supplies, a DBE must "be responsible for negotiating price, determining quality and quantity, ordering the material and installing and paying for the material itself." The Contractor shall submit DBE Joint Check Request Form for the Engineer approval prior to using a joint check.

Material costs paid by the Contractor directly to the material supplier is not allowed. If proper procedures are not followed or the Engineer determines that the arrangement results in lack of independence for the DBE involved, no DBE credit will be given for the DBE's participation as it relates to the material cost.

#### **Prompt Payment**

Prompt payment to all subcontractors shall be in accordance with Section 1-08.1. Prompt Payment requirements apply to progress payments as well as return of retainage.

#### Reporting

The Contractor and all subcontractors/suppliers/service providers that utilize DBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify DBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this Contract.

#### Decertification

When a DBE is "decertified" from the DBE program during the course of the Contract, the participation of that DBE shall continue to count as DBE participation as long as the subcontract with the DBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a DBE does not have an executed subcontract agreement at the time of decertification.

## Consequences of Non-Compliance Each contract with a Contractor (and e

Each contract with a Contractor (and each subcontract the Contractor signs with a Subcontractor) must include the following assurance clause:

The Contractor, subrecipient, or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the Contractor from future bidding as non-responsible.

## **Payment**

Compensation for all costs involved with complying with the conditions of this Specification and any other associated DBE requirements is included in payment for the associated Contract items of Work, except otherwise provided in the Specifications.

(June 1, 2017 WSDOT GSP)

#### 1-07.11.OPT6.GR1 Small Business Enterprise Participation

## Small Business Enterprise Participation

The Small Business Enterprise (SBE) Program is an element of the Disadvantaged Business Enterprise (DBE) Program in accordance with the requirements of 49 CFR Part 26.39. As such, the requirements of this contract establish affirmative efforts to utilize SBE certified firms on construction projects. No preference will be included in the evaluation of Bids/Proposals. No minimum level of SBE participation shall be required as a Condition of Award and Bids/Proposals may not be rejected or considered non-responsive on that basis.

## **Voluntary SBE Goals**

A voluntary goal amount of ten percent of the Contract bid amount is established.

The goal is voluntary, but achievement of the goal is encouraged. No preference will be included in the evaluation of bids/proposals. Bidders may contact the Washington State Office of Minority and Women's Business Enterprises (OMWBE) at 360-664-9750 or visit www.omwbe.wa.gov to obtain information on certified SBE firms.

8 9 10

11 12

13 14

15 16 17

22 23 24

25 26 27

28 29 30

> 32 33 34

31

35 36 37

38

39

40

41 42

43

44 45

46 47 48

> 49 50

individuals, the Contracting Agency will request that the Contractor give evidence that he has requested his insurance company to make personal contact with the claimant. Any settlement for insurance claims shall be strictly an act restricted to the claimant, the Contractor and his insurance company.

damaged. In the event such occurs, and claims for damages are filed by the

Any additional costs due to delays or restrictions due to the construction within the Right-of-Way and furnishing access to adjacent property owners shall be considered incidental to the project, and shall also be merged in the respective unit and lump sum prices Bid.

#### 1-07.17 **Utilities and Similar Facilities**

## **Utilities and Similar Facilities**

Section 1-07.17 is supplemented with the following:

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

Public and private utilities, or their Contractors, will furnish all Work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the Work for this project.

Puget Sound Energy intends to temporarily de-energize the overhead line in proximity of soldier pile wall for wall construction while Comcast and Frontier intend to lash lines to tree to provide space as needed.

The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer, all affected subcontractors, and all utility owners and their Contractors prior to beginning onsite Work.

The following addresses and telephone numbers of utility companies or their Contractors that will be adjusting, relocating, replacing or constructing utilities within the project limits are supplied for the Contractor's use:

P.O. BOX 90868 Bellevue, WA 98009-0868 Attn: Dennis Booth 425-417-9188 Century Link (Telecommunications)

Puget Sound Energy (Gas & Electric)

Paul DeLong 1550 Newport Way NW Issaguah, WA 98027 425-345-6258

Comcast (Telecommunications)

1 Joe Fordon 2 1525 75th Street SW #200 3 Everett, WA 98203 4 425-263-5348 6 Sammamish Plateau Water 7 1510 – 228th Avenue SE

Sammamish Plateau Water and Sewer District [SPWSD] (Water & Sewer) 1510 – 228th Avenue SE

Sammamish, WA 98075 Attn: Kyle Wong 425-392-4931 ext. 217

Frontier 1800 41st Street Everett, WA 98203 Thomas Dacy 425-261-6342

The Contractor shall give fourteen (14) calendar-day's notice before planned work requiring relocations and forty-eight (48) hours-notice to all utility companies/agencies involved where work is to take place and in all other respects comply with the provisions of Chapter 19.122 RCW. Notice shall include, but not be limited to, the utility companies/agencies serving the area.

## **Locate Existing Utilities**

A reasonable attempt has been made to locate existing utilities; however, the exact location and/or depth is unknown in most instances. It is the responsibility of the Contractor to locate the existing utilities and their respective depths.

Accordingly, a bid item has been provided in the proposal to cover the cost of field exploration through excavation or other means to locate more precisely the underground utilities as to their precise location and depth. The contractor shall decide on the difficulties to be encountered in constructing the project and determine therefrom the extent of exploration (beyond that specifically referenced and required by the contract documents) required to facilitate the construction of this project to first prevent damage to those utilities by field verifying excavation locations, and secondly to determine if the new construction is to go around, over, or under an existing utility, or when paralleling an existing utility to insure adequate separation and alignment can be maintained.

 The Lump Sum contract price for the item "Locate Existing Utilities" shall include all costs of digging exploratory pits, to further locate utilities more precisely, as to location and depth as required in the Contract Documents and as further needed for this project. Where underground utilities are found to be in close proximity or in the way of construction, such condition shall not be deemed to be a changed or differing site condition, if minor pipe alignment or grade can be modified to facilitate construction, such minor alignment shall be provided at no additional cost to the Contracting Agency.

## 1-07.17(3) Utility Service (New Section)

(June 2006 City of Sammamish)

Section 1-07.17(3) is added as follows:

The Contractor shall maintain the operational service of all existing utilities, to include water, storm, power, telephone, cable TV, sanitary, and gas except where this Contract requires specifically for its temporary interruption. Where services are to be temporarily interrupted, affected parties shall be notified in writing at least 48 hours and not more than 72 hours in advance of the time and period of shut-down. Language, format, etc. of written notices shall be reviewed and approved by the Contracting Agency prior to distribution by the Contractor. The Contractor shall make every effort to keep scheduled shut downs to periods of anticipated minimum usage and for the least period of time.

No utility service shall be shut down or "out of service" for more than four (4) hours per day.

Should a non-scheduled shutdown of any utility be required for a period in excess of four hours, the Contractor shall take necessary measures to provide temporary service. The method of all temporary utility services shall first be approved by the Contracting Agency.

## 1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

#### 1-07.18 Insurance

(January 4, 2016 APWA GSP)

## 1-07.18(1) General Requirements

- A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.
- B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.
- C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

11

15 16

22

23

28

29

30

31 32 33

35 36 37

38

39

40

34

41 42 43

44 45 46

50

1-07.18(3) Subcontractors 47 48 49

The Contractor shall cause each Subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors.

- D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or selfinsured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.
- E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.
- F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency
- G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach. immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

## 1-07.18(2) Additional Insured

All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder's Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each Subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.

## 1-07.18(4) Verification of Coverage

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Verification of coverage shall include:

- 1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
- 2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
- 3. Any other amendatory endorsements to show the coverage required herein.
- 4. A notation of coverage enhancements on the Certificate of Insurance shall <u>not</u> satisfy these requirements actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

#### 1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy's deductibles or self-

insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

2 3 4

5

6 7

8

9

1

## 1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, productscompleted operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

10 11 12

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

13 14 15

16

Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

17 18

Such policy must provide the following minimum limits:

19 20

21

22

\$1,000,000	Each Occurrence	Э

\$2,000,000 General Aggregate

\$2,000,000 Products & Completed Operations Aggregate

\$1,000,000 Personal & Advertising Injury each offence

23 24

\$1,000,000 Stop Gap / Employers' Liability each accident

25 26

27

28

29

## 1-07.18(5)B Automobile Liability

Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

30 31 32

Such policy must provide the following minimum limit:

33 34 35

36 37 \$1,000,000 Combined single limit each accident

## 1-07.18(5)C Workers' Compensation

The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

38 39

#### 1-07.23 **Public Convenience and Safety**

40 41

## 1-07.23(1) Construction Under Traffic

42

Section 1-07.23(1) is supplemented with the following:

43 44 45

(June 2006 City of Sammamish)

46 47 48

49

The Contractor shall be responsible for proper notification to and coordination with all school districts, police and fire departments, U.S. mail, and all other persons or agencies which provide public service types of business (refuse, etc.) which will be affected by this project, and written notification shall be given at least one (1) week in advance of construction. It shall be the Contractor's

responsibility to keep the school district and fire departments and others fully advised of his construction progress, any required detours, and also the time of completion of the project.

(January 2, 2012 WSDOT GSP)

#### Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance From Traveled Way (Feet)			
35 mph or less	10 *			
40 mph	15			
45 to 55 mph	20			
60 mph or greater	30			

<sup>\*</sup> or 2-feet beyond the outside edge of sidewalk

## Minimum Work Zone Clear Zone Distance

(January 5, 2015 WSDOT GSP)

Lane closures are subject to the following restrictions:

- 1. The Contractor shall maintain one (1) lane of traffic open at all times during construction.
- 2. Single lane closures shall be allowed during the following restrictions:

- a. 228th Avenue 9:30 am to 3:00 pm
- b. NE 8<sup>th</sup> Street 9:30 am to 3:00 pm
- c. SE Duthie Hill Rd 9:30 am to 3:30 pm
- d. Issaguah-Pine Lake Rd SE 9:30 am to 3:30 pm
- e. SE Issaguah-Beaver Lake Rd 9:00 am to 3:00 pm

Vehicles in queues shall not be stopped for more than 15 minutes during single lane closures. During the operation of one-way traffic control, flaggers shall work to minimize the time that vehicles are waiting in queues.

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

Lane closures are not allowed on any of the following:

- 1. A holiday,
- 2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
- 3. After 12:00 PM (noon) on the day prior to a holiday or holiday weekend, and
- 4. Before 7:00 AM on the day after the holiday or holiday weekend.

# (NWR February 14, 2005) Signs and Traffic Control Devices

All signs and traffic control devices for the permitted closures shall only be installed during the specified hours. Construction signs, if placed earlier than the specified hours of closure, shall be turned or covered so as not to be visible to motorists.

## 1-07.24 Rights of Way

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor's construction activities shall be confined within these limits, unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work. Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

#### SECTION 1-08, PROSECUTION AND PROGRESS

Add the following new Section:

## 1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new Section:

## 1-08.0(1) Preconstruction Conference

(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the Work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

- 1. To review the initial progress schedule;
- 2. To establish a working understanding among the various parties associated or affected by the Work;
- 3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
- 4. To establish normal working hours for the Work;
- 5. To review safety standards and traffic control; and

5 6 7

8 9

10 11 12

13 14 15

16

17

22 23

24 25 26

27

32 33 34

35

41 42 43

44

45 46 47

48 49 50

To discuss such other related items as may be pertinent to the Work.

The Contractor shall prepare and submit at the preconstruction conference the following:

- 1. A breakdown of all lump sum items;
- 2. A preliminary schedule of working drawing submittals; and
- 3. A list of material sources for approval if applicable.

Add the following new section:

## 1-08.0(2) Hours of Work

(December 8, 2014 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than noon on the working day prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

- 1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
- 2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
- 3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
- 4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.
- 5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

### 1-08.1 Subcontracting

(November 30, 2018 APWA GSP, Option A)

The eighth paragraph is revised to read:

The Contractor shall certify to the actual amount received from the Contracting Agency and amounts paid to all firms that were used as Subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the Contract. This includes all Disadvantaged, Minority, Small, Veteran or Women's Business Enterprise firms. This Certification shall be submitted to the Engineer on a monthly basis each month between Execution of the Contract and Physical Completion of the Contract using the application available at: https://wsdot.diversitycompliance.com. A monthly report shall be submitted for every month between Execution of the Contract and Physical Completion regardless of whether payments were made or work occurred.

The Contractor shall comply with the requirements of RCW 39.04.250, 39.76.011, 39.76.020, and 39.76.040, in particular regarding prompt payment to Subcontractors. Whenever the Contractor withholds payment to a Subcontractor for any reason including disputed amounts, the Contractor shall provide notice within 10 calendar days to the Subcontractor with a copy to the Contracting Agency identifying the reason for the withholding and a clear description of what the Subcontractor must do to have the withholding released. Retainage withheld by the Contractor prior to completion of the Subcontractors work is exempt from reporting as a payment withheld and is not included in the withheld amount. The Contracting Agency's copy of the notice to Subcontractor for deferred payments shall be submitted to the Engineer concurrently with notification to the Subcontractor.

## 1-08.3 Progress Schedule

## 1-08.3(2)A Type A Progress Schedule (March 13, 2012 APWA GSP)

Revise this section to read:

The Contractor shall submit  $\underline{5}$  copies of a Type A Progress Schedule no later than  $\underline{at}$  the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

Delete this section and replace it with the following:

1-08.4 Notice to Proceed and Prosecution of Work (July 23, 2015 APWA GSP)

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

## 1-08.5 Time for Completion

(November 30, 2018 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the

 Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor's obligations under the contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical work on the project must be complete; and

 2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:

a. Certified Payrolls (per Section 1-07.9(5)).

b. Material Acceptance Certification Documents

 c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.

 d. Final Contract Voucher Certification

 e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors

 . A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).

g. Property owner releases per Section 1-07.24

(March 13, 1995 WSDOT GSP)

 Section 1-08.5 is supplemented with the following:

 This project shall be physically completed within 60 working days noted in the Notice to Contractors.

# 1-08.9 Liquidated Damages (August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

 When the Contract Work has progressed to <u>Substantial Completion as defined in the Contract</u>, the Engineer may determine that the work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

45

The Contractor shall, whenever so requested, give the Contracting Agency and/or the Engineer access to all invoices, bills of lading and other records relating to the Work, and shall, without charge therefore, provide measures and scales with adequate capacity for and assistance for measuring or weighing any of the materials.

#### 1-09.6 Force Account

(October 10, 2008 APWA GSP)

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common Proposal for Bidders. All such dollar amounts are to become a part of Contractor's total Bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount of Work will correspond with those estimates. Payment will be made on the basis of the amount of Work actually authorized by Engineer.

(June 2006 City of Sammamish)

Prior to performing force account work, the Contractor shall submit to the Engineer an Equipment List containing pertinent information as to the type of equipment to be used, i.e., make, model, year, horse-power, serial numbers, optional attachments, capacity, etc., and the current equipment rental rates for such equipment. No force account payment will be made until the Engineer has received and approved the completed Equipment List or necessary work activities.

## 1-09.9 Payments

(March 13, 2012 APWA GSP)

Delete the first four paragraphs and replace them with the following:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.

- 2. Lump Sum Items in the Bid Form based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
- 3. Materials on Hand 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
- 4. Change Orders entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

- 1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
- 2. The amount of progress payments previously made; and
- 3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

## 1-09.11 Disputes and Claims

## 1-09.11(3) Time Limitation and Jurisdiction

(November 30, 2018 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

#### 1-09.13 Claims Resolution

## 1-09.13(3) Claims \$250,000 or Less

(October 1, 2005 APWA GSP)

Delete this Section and replace it with the following:

 The Contractor and the Contracting Agency mutually agree that those claims that total \$250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Administration of Arbitration

(November 30, 2018 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

## **SECTION 1-10, TEMPORARY TRAFFIC CONTROL**

#### 1-10.1 General

(June 2006 City of Sammamish)

Section 1-10.1 is supplemented with the following:

The Contractor shall conduct its operations so as to offer the least possible obstruction and inconvenience to the public, and the Contractor shall have under construction no greater length or amount of Work than the Contractor can prosecute properly with due regards to the rights of the public. The Contractor shall not open up sections of the Work and leave them unfinished, but rather, the Work shall be finished as it proceeds, insofar as practicable. The Contractor shall further note that daily cleanup, waste haul, pavement restoration requirements, etc., are also important and are required as further noted herein.

All public traffic shall be permitted to pass through the Work with as little inconvenience and delay as possible. The Contracting Agency will not furnish flagmen or any devices for the control of traffic.

 The Contractor shall keep all existing roads, temporary detour roadway, and streets adjacent to or within the limits of the project open and maintained in a good and safe condition for traffic at all times unless otherwise specified herein or approved by the Contracting Agency. The Contractor shall promptly remove any deposits or debris and shall repair any damage resulting from its operations. Trenches shall be completely backfilled and capped with approved asphalt mix or be steel plated (suitable for HS-20 loading) at the end of each day. Temporary patching of pavement cuts with an approved asphalt concrete mix shall be completed prior to opening to traffic. Temporary patches shall be maintained in a "smooth" condition by the Contractor at all times and checked on a daily basis. Temporary striping shall be provided.

Construction shall also be conducted so as to cause as little inconvenience as possible to abutting property owners. Convenient and clearly marked access to driveways, houses and buildings along the line of Work shall be maintained and temporary approaches to crossing or intersecting streets shall be provided and kept in good and smooth condition. When the abutting owners' access across the Rights-of-Way line is to be replaced under the Contract by other access, the existing access shall not be closed until the replacement access facility is available. Adjacent property owner's driveways must be left open and accessible at all times during the course of the project unless otherwise specified herein or approved by the Contracting Agency.

Upon completion of trench backfilling and compaction and prior to opening to vehicular traffic, all trenches shall be brought to a smooth, even condition free of bumps and depressions, satisfactory for the use of public traffic with steel plates, controlled density fill, or approved temporary asphalt mix, as required per these Special Provisions.

Roadways, streets and driveways, including sidewalks, shall be swept clean at the conclusion of each day's operations and at such other times to insure the safety of the traveling public and to prevent inconvenience to the public and owners of private property adjacent to the project.

The Contracting Agency reserves the right to restrict the Contractor to various streets and times of construction during the entire project; all costs of which shall be included in other pay items involved on the project.

The Contractor shall be responsible for constructing, furnishing, placing, and maintaining all barricades, warning lights, and related traffic control signs, and for the furnishing of all flag persons, equipment for flag persons, pilot cars, and labor for traffic control as necessary and in accordance with the traffic control plan(s), modified traffic control plan(s), or temporary access plan(s) approved by the Engineer. If a modification to traffic control is deemed necessary by the Engineer, the Contractor shall immediately implement any requested modification(s). The need for flashing warning lights shall be as determined by the Engineer.

The Contractor shall patrol the traffic control area at the beginning of the work day, twice during the work day, at the end of the work day, and more often if necessitated to reset all disturbed or missing signs and traffic control devices or immediately refurnish such items if they have been stolen or permanently damaged. All control signs necessary for nighttime traffic control shall be effective and have flashing lights installed to enhance visibility.

Upon failure of the Contractor to provide immediately such flagmen and provide, erect, maintain, and remove such signs when ordered to do so by the Contracting Agency, the Contracting Agency shall be at liberty, without further notice to the Contractor or its Surety, to provide the necessary flagmen, and labor to erect, maintain, install and/or remove barricades and lights and to erect, maintain and remove additional signs and deduct all of the costs thereof from any payments due or coming due the Contractor.

In addition to where shown on approved traffic control plans, portable changeable message signs provided under this contract will be used to provide advance

notification to motorists of construction work. The Contractor shall place two (2) portable changeable message signs at locations specified by City of Sammamish Traffic Engineer at least one week prior to construction. This will be paid under lump sum bid item for "Project Temporary Traffic Control".

## 1-10.2 Traffic Control Management

## 1-10.2(1) General

Section 1-10.2(1) is supplemented with the following:

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust 27055 Ohio Ave. Kingston, WA 98346 (360) 297-3035

Evergreen Safety Council 12545 135<sup>th</sup> Ave. NE Kirkland, WA 98034-8709 1-800-521-0778

The American Traffic Safety Services Association 15 Riverside Parkway, Suite 100 Fredericksburg, Virginia 22406-1022 Training Dept. Toll Free (877) 642-4637 Phone: (540) 368-1701

## 1-10.2(2) Traffic Control Plans

(June 2006 City of Sammamish)

The first paragraph is revised to read:

The Contractor will prepare a Traffic Control Plan showing a method of handling traffic through the work areas conforming to the Contractor's method of construction sequencing. This plan shall be prepared in accordance with the latest issue of the MUTCD, WSDOT Standard Plans and these Specifications. All construction signs, flaggers, spotters, and other traffic control devices are to be shown on the traffic control plan. This plan shall be provided to the Engineer for approval at least 10-calendar days in advance of the time the signs and other traffic control devices are scheduled to be installed and utilized.

Section 1-10.2(2) is supplemented with the following:

The Contractor shall be responsible for traffic control in the vicinity of the Work being performed to include furnishing, supplying and maintaining proper barricading, flagmen and signing. It is the intent of the Contracting Agency to have Roadways "open" during construction. The Contractor shall allow access

10

11 12 13

18 19

20

21 22

23 24

25

> 31 32 33

34

35 36

30

37 38 39

40 41 42

43 44

45 46 47

by local traffic and emergency vehicles at all times during construction. Temporary closures, detours, or restricted use may be approved by the Contracting Agency due to special construction situations or concerns; however, the Contractor shall Bid the project to leave the Roadway open during construction activities and to provide adequate traffic control.

The minimum lane widths through traffic control zones shall be ten feet with a minimum shy distance of one foot to any pavement edge, shoulder obstruction, or traffic control device.

## 1-10.3(1)B Other Traffic Control Labor

Section 1-10.3(1)B is supplemented with the following:

#### **Uniformed Police Officer**

1-10.4 Measurement

The Contractor shall arrange for off-duty uniformed police officers to be present for the following:

- Countermanding a traffic signal indication at a signalized intersection.
- 2. Directing vehicle and pedestrian traffic when a traffic signal indication is turned off or is inoperative.
- 3. For all other conditions where the Engineer deems it necessary for safety, including work during hours of darkness.

The contractor shall coordinate use off-duty King County Deputies unless it is unable to respond to a request for assistance. Off-duty police officers must be paid a minimum of four (4) hours for any shift worked. Requests must be made at least one (1) week prior to the desired time. The off-duty police officer shall be in addition to all other personnel required for flagging according to the approved traffic control plan.

The Contractor must obtain prior approval for use of uniformed police officers through their Approved Traffic Control Plan and approved amendments to the Plan.

A Uniformed Police Officer shall be provided in the event of accidental power outages or disruption of a signalized intersection as a result of Contractor's Work. The Uniformed Police Officer shall be provided at Contractor's expense and remain in place until the intersection becomes satisfactorily operational as determined by City of Sammamish Traffic Engineer or his/her representative.

## 1-10.4(2) Item Bids With Lump Sum for Incidentals

Section 1-10.4(2) is supplemented with the following:

"Uniformed Police Officer" will be measured by the hour with a minimum of four hours per shift. Hours will be measured for each Uniformed Police Officer directing or monitoring traffic, as shown on an approved Traffic Control Plan or

payment will be made for a UPO.

40

1 2	DIVISION 8 MISCELLANEOUS CONSTRUCTION
3 4 5	SECTION 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical
6 7	8-20.1 Description
8 9	This section is supplemented with the following:
10 11 12 13 14 15 16 17	<ul> <li>The work performed under this Section consists of:</li> <li>Removing, relocating, and installing of 3- and 4-section traffic signal heads with new Light Emitting Diode (LED) ball and arrow displays on existing traffic signal mast arms.</li> <li>The installation of new conductors as required by these plans for Flashing Yellow Arrow (FYA) operations.</li> <li>Installation of new traffic signal controllers and signal conflict monitors.</li> <li>Installation of all associated equipment presented in these specifications and the contract plans required for Flashing Yellow Arrow (FYA) operations at 6 locations</li> </ul>
19 20	within the City of Sammamish, WA.
21 22	8-20.1(1) Regulations and Code
23 24	The last paragraph is revised to read:
25 26 27 28 29 30	Persons performing electrical Work shall be certified in accordance with and supervised as required by RCW 19.28.161. Proof of certification shall be worn at all times in accordance with WAC 296-46B-942. Persons failing to meet these certification requirements may not perform any electrical work, and shall stop any active electrical work, until their certification is provided and worn in accordance with this Section.
31 32	8-20.2 Materials
33 34	8-20.2(1) Equipment List and Drawings
35 36 37	This section is supplemented with the following:
38 39 40	Manufacturer's data for materials proposed for use in the contract which require approval shall be submitted in one complete package.
11 12	8-20.3 Construction Requirements
43	8-20.3(1) General
14 15 16	Add the following new sections:
+6 47 48	8-20.3(1)A Electrical Equipment Removals

Removals associated with the electrical system shall not be stockpiled within the job site without the Engineer's approval.
8-20.3(1)B Contracting Agency/Operations Agency Owned Equipment
A portion of the existing electrical equipment to be removed shall remain the property of the Contracting Agency/Operations Agency.
The following shall be disconnected, dismantled, and delivered to the Contracting Agency/Operations Agency:
Traffic signal cabinet equipment including conflict monitors, controllers, etc. Signal heads Signal displays Mounting brackets Signage
Contractor shall coordinate with City of Sammamish Signal Technicians for delivery of materials listed above at least five days in advance. Per City of Sammamish Signal Technician instructions, removed electrical equipment which remains the property of the Contracting Agency/Operations Agency shall be delivered to the following:
City of Sammamish Traffic Operations Unit Attn: Melissa Lucas 21805 SE 8 <sup>th</sup> St Sammamish, WA 98075 Phone: (425) 295-5127
King County Traffic and Special Operations Unit Shop Attn: Ula Tuifua 155 Monroe Ave NE Renton, WA 98075 Phone: (206) 477-1490
Five days written advance notice shall be delivered to both the Engineer and the Traffic Signal Technician at the address listed above. Delivery shall occur during the hours of 8:00 a.m. to 2:00 p.m. Monday through Friday. Material will not be accepted without the required advance notice.
Equipment damaged during removal or delivery shall be repaired or replaced to the Engineer's satisfaction at no cost to the Contracting Agency/Operations Agency.
The Contractor shall be responsible for unloading the equipment where directed by the Engineer at the delivery site.

#### 2 3 All removals associated with an electrical system, which are not designated to 4 remain the property of the Contracting Agency, shall become the property of the 5 Contractor and shall be removed from the project. 6 7 The Contractor shall: 8 9 Remove all wires for discontinued circuits from the conduit system. 10 11 Remove elbow sections of abandoned conduit entering junction boxes. 12 13 Abandoned conduit encountered during excavation shall be removed to the 14 nearest outlets or as directed by the Engineer. 15 16 Remove foundations entirely, unless the Plans state otherwise. 17 18 Backfill voids created by removal of foundations and junction boxes. Backfilling and compaction shall be performed in accordance with Section 19 20 2-09.3(1)E 21 22 8-20.3(8) Wiring 23 24 This section is supplemented with the following: 25 26 8-20.3(8) Wire Labels 27 At each junction box, all illumination wires, power supply wires, and 28 communication cable shall be labeled with a PVC marking sleeve. For 29 illumination and power supply circuits the sleeve shall bear the circuit number. For communication cable the sleeve shall be marked "Comm.". 30 31 32 8-20.3(9) Bonding, Grounding 33 34 This section is supplemented with the following: 35 36 Where shown in the Plans or where designated by the Engineer, the metal frame 37 and lid of existing junction boxes shall be grounded to the existing equipment 38 arounding system. The existing equipment grounding system shall be derived 39 from the service serving the raceway system of which the existing junction box 40 is a part. 41 42 8-20.4 Measurement 43 44 This section is supplemented with the following: 45 "Traffic Signal System", (Bid Items 7 through 16) shall be measured as lump 46 47 sum.

1

8-20.3(1)C Contractor Owned Removals

## 8-20.5 Payment

This section is supplemented with the following:

"Traffic Signal System \_\_\_\_\_", lump sum (Bid Items 7 through 16)

The lump sum bid price in the Proposal for "Traffic Signal System \_\_\_\_\_" will be full compensation for the costs of all labor, tools, equipment, testing, and materials necessary or incidental to remove and install the complete signal head system as defined in the Plans, Standard Specifications, and these Special Provisions, including:

- 1. Furnishing or removing all materials.
- 2. Assembling and installing all materials.
- 3. Modifying and connecting to existing electrical systems.
- 4. All other signal equipment identified in these plans, junction boxes, restoring facilities destroyed or damaged during construction, salvaging existing materials, for making all required tests, and all items included in the Plans and these Special Provisions. This also includes replacement of any items not shown on the Plans that are damaged during the installation of electrical materials and that are discovered in the field during construction.

All costs for installing conduit and junction boxes containing both signal wiring and illumination shall be included in the lump sum contract prices for the associated electrical system.

All costs for adjustment of new junction boxes, both to the final grade and any grade adjustments required for the various construction stages proposed in the Contract, or for alternative stages proposed by the Contractor, shall be included in the lump sum contract price for the associated electrical system.

1 2 3	DIVISION 9 MATERIALS
4	SECTION 9-29, Illumination, Signal, and Electrical
5 6	9-29.2(1)A1 Concrete Junction Boxes
7 8	This section is supplemented with the following:
9 10 11 12 13 14 15 16	Both the slip-resistant lid and slip-resistant frame shall be treated with Mebac#1 as manufactured by IKG industries, or SlipNOT Grade 3-coarse as manufactured by W.S. Molnar Co. Where the exposed portion of the frame is ½ inch wide or less the slip-resistant treatment may be omitted on that portion of the frame. The slip-resistant lid shall be identified with permanent marking on the underside indicating the type of surface treatment ("M1" for Mebac#1; or "S3" for SlipNOT Grade 3-coarse) and the year manufactured. The permanent marking shall be 1/8 inch line thickness formed with a stainless steel weld bead.
17 18	9-29.3(2)B Multi-Conductor Cable
19 20 21	This section is supplemented with the following:
22 23	Two-conductor through ten-conductor unshielded control cable shall be size 14 AWG.
24 25	9-29.16(2)A Optical Units
26 27	This section is supplemented with the following:
28 29 30 31	<b>LED Signal Displays</b> All traffic signal displays shall be the Light Emitting Diode (LED) type and shall be from one of the following manufacturers:
32 33 34 35 36	Dialight Corporation 1913 Atlantic Avenue Manasquan, NJ 08736 Telephone: (732) 223-9400 Fax: (732) 223-8788
37 38 39 40 41 42	GELcore, LLC 6810 Halle Drive Valley View, OH 44125 Telephone: (216) 606-6555 Fax: (216) 606-6556
43 44 45 46 47 48 49	Precision Solar Controls, Inc. 2960 Market Street Garland, TX 75041 Telephone: (972) 278-0553 Fax: (972) 271-9583

The manufacturer shall provide a written warranty against defects in materials and workmanship for the LED signal modules for a period of 60 months after the installation of the modules. All warranty documentation shall be given to the Engineer prior to installation.

## **APPENDICES**

2 (January 2, 2012 WSDOT GSP)

The following appendices are attached and made a part of this Contract:

4

1

APPENDIX A: Prevailing Wage Rates
 APPENDIX B: Standard Plans and Details

# APPENDIX A Prevailing Wage Rates



# State of Washington Department of Labor & Industries

Prevailing Wage Section - Telephone 360-902-5335 PO Box 44540, Olympia, WA 98504-4540

## Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 09/05/2019

County	<u>Trade</u>	Job Classification	Wage	Holiday	Overtime	Note	*Risk Class
King	Asbestos Abatement Workers	Journey Level	\$50.86	<u>5D</u>	<u>1H</u>		<u>View</u>
King	<u>Boilermakers</u>	Journey Level	\$69.04	<u>5N</u>	<u>1C</u>		<u>View</u>
King	<u>Brick Mason</u>	Journey Level	\$58.82	<u>5A</u>	<u>1M</u>		<u>View</u>
King	<u>Brick Mason</u>	Pointer-Caulker-Cleaner	\$58.82	<u>5A</u>	<u>1M</u>		<u>View</u>
King	Building Service Employees	Janitor	\$25.58	<u>5S</u>	<u>2F</u>		<u>View</u>
King	Building Service Employees	Traveling Waxer/Shampooer	\$26.03	<u>5S</u>	<u>2F</u>		<u>View</u>
King	Building Service Employees	Window Cleaner (Non- Scaffold)	\$29.33	<u>5S</u>	<u>2F</u>		<u>View</u>
King	Building Service Employees	Window Cleaner (Scaffold)	\$30.33	<u>5S</u>	<u>2F</u>		<u>View</u>
King	<u>Cabinet Makers (In Shop)</u>	Journey Level	\$22.74		<u>1</u>		<u>View</u>
King	<u>Carpenters</u>	Acoustical Worker	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Bridge, Dock And Wharf Carpenters	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Carpenter	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Carpenters on Stationary Tools	\$62.57	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Creosoted Material	\$62.54	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Floor Finisher	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Floor Layer	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Carpenters</u>	Scaffold Erector	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Cement Masons</u>	Application of all Composition Mastic	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	<u>Cement Masons</u>	Application of all Epoxy Material	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	<u>Cement Masons</u>	Application of all Plastic Material	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	<u>Cement Masons</u>	Application of Sealing Compound	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons		\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>

		Application of Underlayment					
King	Cement Masons	Building General	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Composition or Kalman Floors	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Concrete Paving	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Curb & Gutter Machine	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Curb & Gutter, Sidewalks	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Curing Concrete	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Finish Colored Concrete	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Floor Grinding	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Floor Grinding/Polisher	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Green Concrete Saw, self- powered	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Grouting of all Plates	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Grouting of all Tilt-up Panels	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Gunite Nozzleman	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Hand Powered Grinder	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Journey Level	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Patching Concrete	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Pneumatic Power Tools	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	<u>Cement Masons</u>	Power Chipping & Brushing	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Sand Blasting Architectural Finish	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Screed & Rodding Machine	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Spackling or Skim Coat Concrete	\$62.47	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Troweling Machine Operator	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Troweling Machine Operator on Colored Slabs	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Cement Masons	Tunnel Workers	\$62.97	<u>7A</u>	<u>4U</u>		<u>View</u>
King	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	\$116.20	<u>7A</u>	<u>4C</u>		View
King	Divers & Tenders	Dive Supervisor/Master	\$79.23	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Divers & Tenders	Diver	\$116.20	<u>7A</u>	<u>4C</u>	<u>8V</u>	<u>View</u>
King	Divers & Tenders	Diver On Standby	\$74.23	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Divers & Tenders	Diver Tender	\$67.31	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Divers & Tenders	Manifold Operator	\$67.31	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Divers & Tenders	Manifold Operator Mixed Gas	\$72.31	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$67.31	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Divers & Tenders	Remote Operated Vehicle Tender	\$67.31	<u>7A</u>	<u>4C</u>		<u>View</u>

King Dredge Workers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Assistant Engineer	\$56.44	<u>5D</u>	<u>3F</u>	I	<u>View</u>
King Dredge Workers King Dredge Workers King Dredge Workers King Dredge Workers King Drywall Applicator King Drywall Tapers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Assistant Mate (Deckhand)	\$56.00	5D	3F		View
King Dredge Workers King Dredge Workers King Dredge Workers King Dredge Workers King Drywall Applicator King Drywall Applicator King Drywall Tapers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Boatmen	\$56.44	5D	3F		View
King Dredge Workers King Dredge Workers King Drywall Applicator King Drywall Tapers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Engineer Welder	\$57.51	5D	3F		View
King Dredge Workers King Dredge Workers King Drywall Applicator King Drywall Tapers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Leverman, Hydraulic	\$58.67	 5D	3F		View
King Drywall Applicator King Drywall Tapers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Mates	\$56.44	<u>5D</u>	3F		View
King Drywall Applicator King Drywall Tapers King Electrical Fixture Maintenance Work King Electricians - Insid King Electricians - Power Construction		Oiler	\$56.00	5D	3F		View
King Electricians - Insid King Electricians - Power Construction	or	Journey Level	\$62.44	<u>5D</u>	1H		View
King Electricians - Insid King Electricians - Power Construction		Journey Level	\$62.94	<u></u> <u>5P</u>	1 <u>E</u>		View
King Electricians - Insid King Electricians - Moto King Electricians - Power Construction		Journey Level	\$30.59	<u>5L</u>	1 <u>E</u>		View
King Electricians - Insid King Electricians - Moto King Electricians - Power Construction		Cable Splicer	\$83.17	<u>7C</u>	<u>4E</u>		View
King Electricians - Insid King Electricians - Moto King Electricians - Power Construction		Cable Splicer (tunnel)	\$89.34	<u></u> 7C	<u>4E</u>		View
King Electricians - Insid King Electricians - Moto King Electricians - Power Construction		Certified Welder	\$80.36	<u>7C</u>	4E		View
King Electricians - Insid King Electricians - Insid King Electricians - Insid King Electricians - Moto King Electricians - Moto King Electricians - Power Construction King Electronic Technic King Elevator Construct King Elevator Construct King Fabricated Precast Concrete Products King Fence Erectors King Fence Erectors		Certified Welder (tunnel)	\$86.25	<u>7C</u>	4E		View
King Electricians - Inside King Electricians - Inside King Electricians - Inside King Electricians - Motor King Electricians - Power Construction King Electronic Technic King Elevator Construct King Elevator Construct King Fabricated Precast Concrete Products King Fence Erectors King Fence Erectors		Construction Stock Person	\$41.48	7 <u>C</u>	4E		View
King Electricians - Inside King Electricians - Motor King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors		Journey Level	\$77.55	7 <u>C</u>	4E		View
King Electricians - Motor Construction  King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors		Journey Level (tunnel)	\$83.17	<u>7C</u>	4E		View
King Electricians - Power Construction  King Electronic Technic King Elevator Construction  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors		Journey Level	\$45.08	<u>5A</u>	1 <u>B</u>		View
King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors		Cable Splicer	\$79.60	<u>5A</u> 5A	4 <u>D</u>		View
King Electricians - Power Construction  King Electronic Technic King Elevator Construction  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors							
King Electricians - Power Construction  King Electronic Technic  King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors		Certified Line Welder	\$72.98	<u>5A</u>	<u>4D</u>		<u>View</u>
Construction  King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors	<u>verline</u>	Groundperson	\$47.94	<u>5A</u>	<u>4D</u>		<u>View</u>
King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors	<u>verline</u>	Heavy Line Equipment Operator	\$72.98	<u>5A</u>	<u>4D</u>		<u>View</u>
King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors	<u>verline</u>	Journey Level Lineperson	\$72.98	<u>5A</u>	<u>4D</u>		<u>View</u>
King Electricians - Power Construction  King Electricians - Power Construction  King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors	<u>verline</u>	Line Equipment Operator	\$62.06	<u>5A</u>	<u>4D</u>		<u>View</u>
Construction  King Electricians - Power Construction  King Electronic Technic King Elevator Construct  King Elevator Construct  King Fabricated Precast Concrete Products  King Fence Erectors  King Fence Erectors	<u>verline</u>	Meter Installer	\$47.94	<u>5A</u>	<u>4D</u>	<u>8W</u>	<u>View</u>
King Elevator Construct King Elevator Construct King Elevator Construct King Fabricated Precast Concrete Products King Fence Erectors King Fence Erectors	<u>verline</u>	Pole Sprayer	\$72.98	<u>5A</u>	<u>4D</u>		<u>View</u>
King Elevator Construct King Elevator Construct King Fabricated Precast Concrete Products King Fence Erectors King Fence Erectors	<u>verline</u>	Powderperson	\$54.55	<u>5A</u>	<u>4D</u>		<u>View</u>
King Elevator Construct King Elevator Construct King Fabricated Precast Concrete Products King Fence Erectors King Fence Erectors	<u>icians</u>	Journey Level	\$51.07	<u>7E</u>	<u>1E</u>		<u>View</u>
King Fabricated Precast Concrete Products King Fence Erectors King Fence Erectors	ctors	Mechanic	\$94.22	<u>7D</u>	<u>4A</u>		View
King Fence Erectors King Fence Erectors	ctors	Mechanic In Charge	\$101.73	<u>7D</u>	<u>4A</u>		<u>View</u>
King Fence Erectors King Fence Erectors		All Classifications - In- Factory Work Only	\$18.25	<u>5B</u>	<u>1R</u>		<u>View</u>
King Fence Erectors		Fence Erector	\$43.11	7A	<u>4V</u>	8Y	View
		Fence Laborer	\$43.11	<u>7A</u>	4V	8Y	View
INITIS   I (USSCI)		Journey Level	\$43.11	<u>7A</u>	4V	8Y	View
King Glaziers		Journey Level	\$66.51	<u>7L</u>	<u>1Y</u>	<del>  _</del>	View
King Heat & Frost Insula Asbestos Workers		Journeyman	\$76.61	<u>5J</u>	<u>4H</u>		View

Tenders	King	Heating Equipment Mechanics	Journey Level	\$85.88	<u>7F</u>	<u>1E</u>		<u>View</u>
Cleaner	King		Journey Level	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King   Inland Boatmen   Deckhand   S56.48   SB   1K   View	King		Journey Level	\$12.00		<u>1</u>		<u>View</u>
King         Inland Boatmen         Deckhand         \$57.48         5B         1K         View           King         Inland Boatmen         Deckhand Engineer         \$58.81         5B         1K         View           King         Inland Boatmen         Launch Operator         \$58.89         5B         1K         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Cleaner Operator         \$31.49         1         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Grout Truck Operator         \$12.00         1         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Head Operator         \$24.91         1         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         To Truck Operator         \$20.45         1         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         To Truck Operator         \$20.45         1         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         To Truck Operator         \$50.44         7A         4C         View           King         Inspection/Cleaning/Sealing Of Sewer	King	Inland Boatmen	Boat Operator	\$61.41	<u>5B</u>	<u>1K</u>		<u>View</u>
King         Inland Boatmen         Deckhand Engineer         \$58.81         5B         1K         Yiew           King         Inland Boatmen         Launch Operator         \$58.89         5B         1K         Yiew           King         Inland Boatmen         Mate         \$57.31         5B         1K         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Grout Truck Operator         \$31.49         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Grout Truck Operator         \$12.00         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Head Operator         \$24.91         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Truck Operator         \$20.45         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Journey Level         \$62.44         7A         4C         Yiew           King         Insulation Applicators         Journey Level         \$62.44         7A         4C         Yiew           King         Laborers         Air, Gas Or Electric         \$50.86	King	<u>Inland Boatmen</u>	Cook	\$56.48	<u>5B</u>	<u>1K</u>		<u>View</u>
King         Inland Boatmen         Launch Operator         \$58.89         5B         1K         View           King         Inland Boatmen         Mate         \$57.31         5B         1K         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Of Sewer & Water Systems By Remote Control         \$12.00         1         View Of Sewer & Water Systems By Remote Control           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Head Operator         \$24.91         1         View Of Sewer & Water Systems By Remote Control           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Technician         \$19.33         1         View Of Sewer & Water Systems By Remote Control           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Truck Operator         \$20.45         1         View Of Sewer & Water Systems By Remote Control           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Journey Level         \$62.44         7A         4C         View Of Sewer & Water Systems By Remote Control           King         Insulation Applicators         Journeyman         \$72.18         7N         10         View Of Sewer & Water Systems By Remote Control           King         La	King	<u>Inland Boatmen</u>	Deckhand	\$57.48	<u>5B</u>	<u>1K</u>		<u>View</u>
King         Inland Boatmen         Mate         \$57.31         5B         1K         View           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Operator         \$31.49         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Grout Truck Operator         \$12.00         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         By Remote Control         \$24.91         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Fechnician         \$19.33         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Tv Truck Operator         \$20.45         1         Yiew           King         Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control         Tv Truck Operator         \$20.45         1         Yiew           King         Insulation Applicators         Journeyman         \$72.18         7N         10         Yiew           King         Laborers         Air, Gas Or Electric Vibrating Screed         \$50.86         7A         4Y         8Y         Yiew           King         Laborers         Airtrac Dr	King	<u>Inland Boatmen</u>	Deckhand Engineer	\$58.81	<u>5B</u>	<u>1K</u>		<u>View</u>
King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control  King Insulation Applicators  King Insulation Applicators  Journey Level \$62.44 7A 4C View Systems By Remote Control  King Insulation Applicators  Journey Level \$62.44 7A 4C View Systems By Remote Control  King Laborers  Air, Gas Or Electric Sto.86 7A 4V 8Y View Systems Airtrac Drill Operator  King Laborers  Ballast Regular Machine Sto.86 7A 4V 8Y View Systems By Remote Control  King Laborers  Batch Weighman Syst. 17 7A 4V 8Y View Systems By Remote Systems By Remote Control  King Laborers  Brick Pavers  Sto.86 7A 4V 8Y View Systems By Remote Systems By Remote Control  King Laborers  Brick Pavers  Sto.86 7A 4V 8Y View Systems By Remote Systems By Remote Control  King Laborers  Brush Hog Feeder  Sto.86 7A 4V 8Y View Systems Systems By Remote Systems Systems Systems Systems By Remote Control  King Laborers  Caisson Worker  Sto.86 7A 4V 8Y View Systems Syste	King	<u>Inland Boatmen</u>	Launch Operator	\$58.89	<u>5B</u>	<u>1K</u>		<u>View</u>
King       Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control       Group Truck Operator       \$31.49       1       Yiew Operator         King       Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control       Grout Truck Operator       \$12.00       1       View Operator         King       Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control       Head Operator       \$24.91       1       View Operator         King       Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control       Technician       \$19.33       1       View Operator         King       Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control       Try Truck Operator       \$20.45       1       View Operator         King       Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control       Journey Level       \$62.44       7A       4C       View Operator         King       Insulation Applicators       Journey Level       \$62.44       7A       4C       View Operator         King       Laborers       Journeyman       \$72.18       7N       1O       View Operator         King       Laborers       Air, Gas Or Electric Vibrating Screed       \$50.86       7A       4V       8Y       View Operator         King       Laborers       Ballast Regula	King	<u>Inland Boatmen</u>	Mate	\$57.31	<u>5B</u>	<u>1K</u>		<u>View</u>
Sewer ft Water Systems   By Remote Control   Sealing   Inspection/Cleaning/Sealing   Of Sewer ft Water Systems   By Remote Control   Sewer ft Water Systems   Sewer ft Wa	King	Of Sewer & Water Systems		\$31.49		<u>1</u>		<u>View</u>
Columbridge	King	Of Sewer & Water Systems	Grout Truck Operator	\$12.00		<u>1</u>		<u>View</u>
Comparison   Com	King	Of Sewer & Water Systems	Head Operator	\$24.91		<u>1</u>		<u>View</u>
Of Sewer & Water Systems By Remote ControlKingInsulation ApplicatorsJourney Level\$62.447A4CViewKingIronworkersJourneyman\$72.187N1OViewKingLaborersAir, Gas Or Electric Vibrating Screed\$50.867A4V8YViewKingLaborersAirtrac Drill Operator\$52.447A4V8YViewKingLaborersBallast Regular Machine\$50.867A4V8YViewKingLaborersBatch Weighman\$43.117A4V8YViewKingLaborersBrick Pavers\$50.867A4V8YViewKingLaborersBrush Cutter\$50.867A4V8YViewKingLaborersBrush Hog Feeder\$50.867A4V8YViewKingLaborersBurner\$50.867A4V8YViewKingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (Juder 30 Lbs.)\$50.867A4V8YView	King	Of Sewer & Water Systems	Technician	\$19.33		<u>1</u>		<u>View</u>
KingIronworkersJourneyman\$72.187N10ViewKingLaborersAir, Gas Or Electric Vibrating Screed\$50.867A4V8YViewKingLaborersAirtrac Drill Operator\$52.447A4V8YViewKingLaborersBallast Regular Machine\$50.867A4V8YViewKingLaborersBatch Weighman\$43.117A4V8YViewKingLaborersBrick Pavers\$50.867A4V8YViewKingLaborersBrush Cutter\$50.867A4V8YViewKingLaborersBrush Hog Feeder\$50.867A4V8YViewKingLaborersBurner\$50.867A4V8YViewKingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$50.867A4V8YViewKingLaborersChipping Gun (Under 30 Lbs.)\$50.867A4V8YView	King	Of Sewer & Water Systems	Tv Truck Operator	\$20.45		<u>1</u>		<u>View</u>
King Laborers Air, Gas Or Electric Vibrating Screed  King Laborers Airtrac Drill Operator S52.44 AV BY View King Laborers Ballast Regular Machine S50.86 AV BY View King Laborers Batch Weighman S43.11 AV BY View King Laborers Brick Pavers Brick Pavers Brush Cutter S50.86 AV BY View King Laborers Brush Hog Feeder S50.86 AV BY View King Laborers Brush Hog Feeder S50.86 AV BY View King Laborers Caisson Worker S50.86 AV BY View King Laborers Caisson Worker S50.86 AV BY View King Laborers Caisson Worker S50.86 AV BY View King Laborers Carpenter Tender S50.86 AV BY View King Laborers Cement Dumper-paving S51.80 AV BY View King Laborers Change House Or Dry S50.86 AV BY View King Laborers Change House Or Dry S50.86 AV BY View King Laborers Chipping Gun (30 Lbs. And Over) Chipping Gun (Under 30	King	Insulation Applicators	Journey Level	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
KingLaborersAirtrac Drill Operator\$52.447A4V8YViewKingLaborersBallast Regular Machine\$50.867A4V8YViewKingLaborersBatch Weighman\$43.117A4V8YViewKingLaborersBrick Pavers\$50.867A4V8YViewKingLaborersBrush Cutter\$50.867A4V8YViewKingLaborersBrush Hog Feeder\$50.867A4V8YViewKingLaborersBurner\$50.867A4V8YViewKingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$50.867A4V8YViewKingLaborersChipping Gun (Under 30 Lbs.)\$50.867A4V8YView	King	Ironworkers	Journeyman	\$72.18	<u>7N</u>	<u>10</u>		<u>View</u>
KingLaborersBallast Regular Machine\$50.867A4V8YViewKingLaborersBatch Weighman\$43.117A4V8YViewKingLaborersBrick Pavers\$50.867A4V8YViewKingLaborersBrush Cutter\$50.867A4V8YViewKingLaborersBrush Hog Feeder\$50.867A4V8YViewKingLaborersBurner\$50.867A4V8YViewKingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$50.867A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YView	King	<u>Laborers</u>		\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King         Laborers         Batch Weighman         \$43.11         7A         4V         8Y         View           King         Laborers         Brick Pavers         \$50.86         7A         4V         8Y         View           King         Laborers         Brush Cutter         \$50.86         7A         4V         8Y         View           King         Laborers         Brush Hog Feeder         \$50.86         7A         4V         8Y         View           King         Laborers         Burner         \$50.86         7A         4V         8Y         View           King         Laborers         Caisson Worker         \$52.44         7A         4V         8Y         View           King         Laborers         Carpenter Tender         \$50.86         7A         4V         8Y         View           King         Laborers         Cement Dumper-paving         \$51.80         7A         4V         8Y         View           King         Laborers         Change House Or Dry         \$50.86         7A         4V         8Y         View           King         Laborers         Chipping Gun (30 Lbs. And \$51.80         7A         4V         8Y         View <td>King</td> <td><u>Laborers</u></td> <td>Airtrac Drill Operator</td> <td>\$52.44</td> <td><u>7A</u></td> <td><u>4V</u></td> <td><u>8Y</u></td> <td><u>View</u></td>	King	<u>Laborers</u>	Airtrac Drill Operator	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King         Laborers         Brick Pavers         \$50.86         7A         4V         8Y         View           King         Laborers         Brush Cutter         \$50.86         7A         4V         8Y         View           King         Laborers         Brush Hog Feeder         \$50.86         7A         4V         8Y         View           King         Laborers         Burner         \$50.86         7A         4V         8Y         View           King         Laborers         Caisson Worker         \$52.44         7A         4V         8Y         View           King         Laborers         Carpenter Tender         \$50.86         7A         4V         8Y         View           King         Laborers         Cement Dumper-paving         \$51.80         7A         4V         8Y         View           King         Laborers         Cement Finisher Tender         \$50.86         7A         4V         8Y         View           King         Laborers         Chiage House Or Dry         \$50.86         7A         4V         8Y         View           King         Laborers         Chipping Gun (30 Lbs. And Over)         \$51.80         7A         4V         8Y <td>King</td> <td><u>Laborers</u></td> <td>Ballast Regular Machine</td> <td>\$50.86</td> <td><u>7A</u></td> <td><u>4V</u></td> <td><u>8Y</u></td> <td><u>View</u></td>	King	<u>Laborers</u>	Ballast Regular Machine	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King         Laborers         Brush Cutter         \$50.86         7A         4V         8Y         View           King         Laborers         Brush Hog Feeder         \$50.86         7A         4V         8Y         View           King         Laborers         Burner         \$50.86         7A         4V         8Y         View           King         Laborers         Caisson Worker         \$52.44         7A         4V         8Y         View           King         Laborers         Carpenter Tender         \$50.86         7A         4V         8Y         View           King         Laborers         Cement Dumper-paving         \$51.80         7A         4V         8Y         View           King         Laborers         Change House Or Dry         \$50.86         7A         4V         8Y         View           King         Laborers         Chipping Gun (30 Lbs. And Over)         \$51.80         7A         4V         8Y         View           King         Laborers         Chipping Gun (Under 30         \$50.86         7A         4V         8Y         View	King	<u>Laborers</u>	Batch Weighman	\$43.11	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
KingLaborersBrush Hog Feeder\$50.867A4V8YViewKingLaborersBurner\$50.867A4V8YViewKingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YView	King	<u>Laborers</u>	Brick Pavers	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
KingLaborersBurner\$50.867A4V8YViewKingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30 Lbs.)\$50.867A4V8YView	King	<u>Laborers</u>	Brush Cutter		<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
KingLaborersCaisson Worker\$52.447A4V8YViewKingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YView	King	Laborers	Brush Hog Feeder		<u>7A</u>		<u>8Y</u>	<u>View</u>
KingLaborersCarpenter Tender\$50.867A4V8YViewKingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YView								<u>View</u>
KingLaborersCement Dumper-paving\$51.807A4V8YViewKingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YView								<u>View</u>
KingLaborersCement Finisher Tender\$50.867A4V8YViewKingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30\$50.867A4V8YViewLbs.)Lbs.)			· ·					<u>View</u>
KingLaborersChange House Or Dry Shack\$50.867A4V8YViewKingLaborersChipping Gun (30 Lbs. And Over)\$51.807A4V8YViewKingLaborersChipping Gun (Under 30 \$50.86)7A4V8YView		<del>                                     </del>			<u>7A</u>		_	<u>View</u>
King         Laborers         Chipping Gun (30 Lbs. And Over)         \$51.80         7A         4V         8Y         View           King         Laborers         Chipping Gun (Under 30 \$50.86 7A Lbs.)         \$50.86 7A         4V         8Y         View								<u>View</u>
KingLaborersChipping Gun (Under 30 Lbs.)\$50.867A4V8YView			Shack		<u>7A</u>			<u>View</u>
Lbs.)	King	<u>Laborers</u>		\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King <u>Laborers</u> Choker Setter \$50.86 <u>7A</u> <u>4V</u> <u>8Y</u> <u>View</u>	King	<u>Laborers</u>		\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
	King	Laborers	Choker Setter	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

King	Laborers	Chuck Tender	\$50.86	<u>7A</u>	<u>4V</u>	8 <u>Y</u>	<u>View</u>
King	Laborers	Clary Power Spreader	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Clean-up Laborer	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Concrete Dumper/Chute Operator	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Concrete Form Stripper	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Concrete Placement Crew	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Concrete Saw Operator/Core Driller	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Crusher Feeder	\$43.11	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Curing Laborer	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Ditch Digger	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Diver	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Drill Operator (Hydraulic, Diamond)	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Dry Stack Walls	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Dump Person	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Epoxy Technician	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Erosion Control Worker	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Faller & Bucker Chain Saw	\$51.80	<u>7A</u>	<u>4V</u>	8Y	View
King	Laborers	Fine Graders	\$50.86	<u>7A</u>	<u>4V</u>	8Y	View
King	Laborers	Firewatch	\$43.11	<u>7A</u>	4V	8Y	View
King	Laborers	Form Setter	\$50.86	7A	4V	8Y	View
King	Laborers	Gabian Basket Builders	\$50.86	<u>7A</u>	<u>4V</u>	8Y	View
King	Laborers	General Laborer	\$50.86	<u>7A</u>	<u>4V</u>	8Y	View
King	Laborers	Grade Checker & Transit Person	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Grinders	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
King	Laborers	Grout Machine Tender	\$50.86	<u>7A</u>	<u>4V</u>	8Y	View
King	Laborers	Groutmen (Pressure) Including Post Tension Beams	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
King	Laborers	Guardrail Erector	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Hazardous Waste Worker (Level A)	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Hazardous Waste Worker (Level B)	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Hazardous Waste Worker (Level C)	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	High Scaler	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Jackhammer	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Laserbeam Operator	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Maintenance Person	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Manhole Builder-Mudman	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Material Yard Person	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

King	<u>Laborers</u>	Motorman-Dinky Locomotive	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Nozzleman (Concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Blaster, Vacuum Blaster)	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
King	<u>Laborers</u>	Pavement Breaker	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pilot Car	\$43.11	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pipe Layer Lead	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pipe Layer/Tailor	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pipe Pot Tender	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pipe Reliner	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pipe Wrapper	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Pot Tender	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Powderman	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Powderman's Helper	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Power Jacks	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Railroad Spike Puller - Power	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Raker - Asphalt	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Re-timberman	\$52.44	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Remote Equipment Operator	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Rigger/Signal Person	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Rip Rap Person	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Rivet Buster	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Rodder	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Scaffold Erector	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Scale Person	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Sloper (Over 20")	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Sloper Sprayer	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Spreader (Concrete)	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Stake Hopper	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Stock Piler	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Swinging Stage/Boatswain Chair	\$43.11	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Tamper & Similar Electric, Air & Gas Operated Tools	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Tamper (Multiple & Self- propelled)	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Toolroom Person (at Jobsite)	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Topper	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

King	Laborers	Track Laborer	\$50.86	7A	4V	8Y	View
King	Laborers	Track Liner (Power)	\$51.80	<u>7A</u>	4V	8Y	View
King	Laborers	Traffic Control Laborer	\$46.10	<u>7A</u>	<u>4V</u>	9C	View
King	Laborers	Traffic Control Supervisor	\$46.10	<u>7A</u>	<u>4V</u>	9C	View
King	Laborers	Truck Spotter	\$50.86	<u></u> 7A	<u>4V</u>	8Y	View
King	Laborers	Tugger Operator	\$51.80	<u>7A</u>	<u>4V</u>	8Y	View
King	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$120.61	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$125.64	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$129.32	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$135.02	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$137.14	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$142.24	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$144.14	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$146.14	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$148.14	<u>7A</u>	<u>4V</u>	<u>9B</u>	<u>View</u>
King	Laborers	Tunnel Work-Guage and Lock Tender	\$52.54	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Tunnel Work-Guage and Lock Tender	\$52.54	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Laborers	Vibrator	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Vinyl Seamer	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Watchman	\$39.18	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Welder	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Well Point Laborer	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers</u>	Window Washer/Cleaner	\$39.18	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers - Underground</u> <u>Sewer &amp; Water</u>	General Laborer & Topman	\$50.86	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	<u>Laborers - Underground</u> <u>Sewer &amp; Water</u>	Pipe Layer	\$51.80	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	\$39.18	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
King	Landscape Construction	Landscape Operator	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Landscape Maintenance	Groundskeeper	\$17.87		<u>1</u>		<u>View</u>
King	<u>Lathers</u>	Journey Level	\$62.44	<u>5D</u>	<u>1H</u>		<u>View</u>
King	Marble Setters	Journey Level	\$58.82	<u>5A</u>	<u>1M</u>		<u>View</u>
King	Metal Fabrication (In Shop)	Fitter	\$15.86		<u>1</u>		<u>View</u>
King	Metal Fabrication (In Shop)	Laborer	\$12.00		<u>1</u>		<u>View</u>
King	Metal Fabrication (In Shop)	Machine Operator	\$13.04		1		<u>View</u>

King	Metal Fabrication (In Shop)	Painter	\$12.00		<u> 1</u>	1	<u>View</u>
King	Metal Fabrication (In Shop)	Welder	\$15.48		<u>1</u>		<u>View</u>
King	<u>Millwright</u>	Journey Level	\$63.94	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Modular Buildings	Cabinet Assembly	\$12.00		<u>1</u>		<u>View</u>
King	Modular Buildings	Electrician	\$12.00		<u>1</u>		<u>View</u>
King	Modular Buildings	Equipment Maintenance	\$12.00		<u>1</u>		<u>View</u>
King	Modular Buildings	Plumber	\$12.00		<u>1</u>		<u>View</u>
King	Modular Buildings	Production Worker	\$12.00		<u>1</u>		<u>View</u>
King	<u>Modular Buildings</u>	Tool Maintenance	\$12.00		<u>1</u>		<u>View</u>
King	Modular Buildings	Utility Person	\$12.00		<u>1</u>		<u>View</u>
King	<u>Modular Buildings</u>	Welder	\$12.00		<u>1</u>		<u>View</u>
King	<u>Painters</u>	Journey Level	\$43.40	<u>6Z</u>	<u>2B</u>		<u>View</u>
King	<u>Pile Driver</u>	Crew Tender	\$67.31	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Pile Driver</u>	Crew Tender/Technician	\$67.31	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$77.93	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	\$82.93	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$86.93	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$91.93	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$94.43	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$99.43	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$101.43	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$103.43	<u>7A</u>	<u>4C</u>		<u>View</u>
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$105.43	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Pile Driver</u>	Journey Level	\$62.69	<u>7A</u>	<u>4C</u>		<u>View</u>
King	<u>Plasterers</u>	Journey Level	\$59.42	<u>7Q</u>	<u>1R</u>		<u>View</u>
King	Playground & Park Equipment Installers	Journey Level	\$12.00		1		<u>View</u>
King	Plumbers & Pipefitters	Journey Level	\$87.69	<u>6Z</u>	<u>1G</u>		<u>View</u>
King	Power Equipment Operators	Asphalt Plant Operators	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Assistant Engineer	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Barrier Machine (zipper)	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators		\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

		Batch Plant Operator: concrete					
King	Power Equipment Operators	Bobcat	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Brooms	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Bump Cutter	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cableways	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Chipper	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Compressor	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Concrete Finish Machine - Laser Screed	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Conveyors	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes friction: 200 tons and over	\$71.26	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$71.26	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Crusher	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Deck Engineer/Deck Winches (power)	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

King	Power Equipment Operators	Derricks, On Building Work	\$69.16	7A	<u>3K</u>	8X	View
King	Power Equipment Operators		\$68.02	<u>7A</u> 7A	3K	8X	View
King	Power Equipment Operators  Power Equipment Operators	Drill Oilers: Auger Type,	\$68.02	<u>7A</u> <u>7A</u>	3K	<u>8X</u>	View
Ving	Power Equipment Operators	Truck Or Crane Mount	\$69.85	71	21/	ov.	Viou
King		Drilling Machine Elevator And Man-lift:	\$65.05	<u>7A</u>	3K	8X	<u>View</u>
King	Power Equipment Operators	Permanent And Shaft Type		<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Gradechecker/Stakeman	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Guardrail Punch	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Horizontal/Directional Drill Locator	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Horizontal/Directional Drill Operator	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Hydralifts/Boom Trucks, 10 Tons And Under	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Loaders, Plant Feed	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Loaders: Elevating Type Belt	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Locomotives, All	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Material Transfer Device	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Motor Patrol Graders	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators		\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

		Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield					
King	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Outside Hoists (Elevators And Manlifts), Air Tuggers, Strato	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Pavement Breaker	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Posthole Digger, Mechanical	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Power Plant	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Pumps - Water	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Rigger and Bellman	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Rollagon	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Roller, Other Than Plant Mix	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Roller, Plant Mix Or Multi- lift Materials	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Roto-mill, Roto-grinder	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Saws - Concrete	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Scrapers - Concrete & Carry All	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Service Engineers - Equipment	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

King	Power Equipment Operators	Shotcrete/Gunite Equipment	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Slipform Pavers	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Spreader, Topsider & Screedman	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Subgrader Trimmer	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Tower Bucket Elevators	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$71.26	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Transporters, All Track Or Truck Type	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Trenching Machines	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Truck Crane Oiler/Driver Under 100 Tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Truck Mount Portable Conveyor	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Welder	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Wheel Tractors, Farmall Type	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators	Yo Yo Pay Dozer	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Asphalt Plant Operators	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Assistant Engineer	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Barrier Machine (zipper)	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

King	Power Equipment Operators- Underground Sewer & Water	Batch Plant Operator, Concrete	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Bobcat	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Brooms	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Bump Cutter	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cableways	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Chipper	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Compressor	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Finish Machine - Laser Screed	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Conveyors	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes friction: 200 tons and over	\$71.26	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

King	Power Equipment Operators- Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$71.26	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Crusher	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Deck Engineer/Deck Winches (power)	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Derricks, On Building Work	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Dozers D-9 & Under	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Drilling Machine	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Gradechecker/Stakeman	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King		Guardrail Punch	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

	Power Equipment Operators- Underground Sewer & Water						
King	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Horizontal/Directional Drill Locator	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Horizontal/Directional Drill Operator	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Hydralifts/Boom Trucks Over 10 Tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Hydralifts/Boom Trucks, 10 Tons And Under	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Loaders, Plant Feed	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Loaders: Elevating Type Belt	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Locomotives, All	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Material Transfer Device	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Motor Patrol Graders	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King			\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

	Power Equipment Operators- Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator					
King	Power Equipment Operators- Underground Sewer & Water	Outside Hoists (Elevators And Manlifts), Air Tuggers, Strato	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Pavement Breaker	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Posthole Digger, Mechanical	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Power Plant	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Pumps - Water	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Rigger and Bellman	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Rollagon	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King		Roller, Other Than Plant Mix	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	View

	Power Equipment Operators- Underground Sewer & Water						
King	Power Equipment Operators- Underground Sewer & Water	Roller, Plant Mix Or Multi- lift Materials	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Roto-mill, Roto-grinder	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Saws - Concrete	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Scrapers - Concrete & Carry All	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Service Engineers - Equipment	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Shotcrete/Gunite Equipment	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Slipform Pavers	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Spreader, Topsider & Screedman	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Subgrader Trimmer	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King		Tower Bucket Elevators	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

	Power Equipment Operators- Underground Sewer & Water						
King	Power Equipment Operators- Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	\$69.85	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	\$70.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	\$71.26	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Transporters, All Track Or Truck Type	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Trenching Machines	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
King	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/Driver Under 100 Tons	\$68.02	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Mount Portable Conveyor	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Welder	\$69.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Wheel Tractors, Farmall Type	\$65.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Equipment Operators- Underground Sewer & Water	Yo Yo Pay Dozer	\$68.55	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$50.96	<u>5A</u>	<u>4A</u>		<u>View</u>
King	Power Line Clearance Tree Trimmers	Spray Person	\$48.35	<u>5A</u>	<u>4A</u>		<u>View</u>
King	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$50.96	<u>5A</u>	<u>4A</u>		<u>View</u>
King	Power Line Clearance Tree Trimmers	Tree Trimmer	\$45.54	<u>5A</u>	<u>4A</u>		<u>View</u>
King	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$34.51	<u>5A</u>	<u>4A</u>		<u>View</u>
King	Refrigeration & Air Conditioning Mechanics	Journey Level	\$82.51	<u>6Z</u>	<u>1G</u>		<u>View</u>
King	Residential Brick Mason	Journey Level	\$58.82	<u>5A</u>	<u>1M</u>		View
King	Residential Carpenters	Journey Level	\$32.06	<del></del>	1		View
King	Residential Cement Masons	Journey Level	\$29.25		1		View
King		Journey Level	\$46.43	<u>7A</u>	4 <u>C</u>		<u>View</u>

	Residential Drywall Applicators					
King	Residential Drywall Tapers	Journey Level	\$47.17	5P	1E	View
King	Residential Electricians	Journey Level	\$36.01		<u>1</u>	View
King	Residential Glaziers	Journey Level	\$44.15	<u>7L</u>	<u>1H</u>	<u>View</u>
King	Residential Insulation Applicators	Journey Level	\$29.87		1	View
King	Residential Laborers	Journey Level	\$26.18		<u>1</u>	<u>View</u>
King	Residential Marble Setters	Journey Level	\$27.38		<u>1</u>	<u>View</u>
King	Residential Painters	Journey Level	\$27.80		1 1	<u>View</u>
King	Residential Plumbers & Pipefitters	Journey Level	\$39.43		1	<u>View</u>
King	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$54.12	<u>5A</u>	<u>1G</u>	<u>View</u>
King	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$51.89	<u>7F</u>	<u>1R</u>	<u>View</u>
King	Residential Soft Floor Layers	Journey Level	\$51.07	<u>5A</u>	<u>3J</u>	<u>View</u>
King	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$48.18	<u>5C</u>	<u>2R</u>	View
King	Residential Stone Masons	Journey Level	\$58.82	<u>5A</u>	<u>1M</u>	<u>View</u>
King	Residential Terrazzo Workers	Journey Level	\$54.06	<u>5A</u>	<u>1M</u>	<u>View</u>
King	Residential Terrazzo/Tile Finishers	Journey Level	\$24.39		1	<u>View</u>
King	Residential Tile Setters	Journey Level	\$21.04		1	<u>View</u>
King	Roofers	Journey Level	\$53.27	<u>5A</u>	<u>3H</u>	<u>View</u>
King	Roofers	Using Irritable Bituminous Materials	\$56.27	<u>5A</u>	<u>3H</u>	<u>View</u>
King	<u>Sheet Metal Workers</u>	Journey Level (Field or Shop)	\$85.88	<u>7F</u>	<u>1E</u>	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Boilermaker	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Carpenter	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Crane Operator	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Electrician	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	\$76.61	<u>5J</u>	<u>4H</u>	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Laborer	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Machinist	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Operating Engineer	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Painter	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Pipefitter	\$36.36	<u>7V</u>	1	<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Rigger	\$36.36	<u>7V</u>	<u>1</u>	<u>View</u>

King	Shipbuilding & Ship Repair	New Construction Sheet Metal	\$36.36	<u>7V</u>	1		View
King	Shipbuilding & Ship Repair	New Construction Shipfitter	\$36.36	<u>7V</u>	1		<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	\$36.36	<u>7V</u>	1		<u>View</u>
King	Shipbuilding & Ship Repair	New Construction Welder / Burner	\$36.36	<u>7V</u>	1		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Boilermaker	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Carpenter	\$44.95	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Crane Operator	\$45.06	<u>7Y</u>	<u>4K</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Electrician	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	\$76.61	<u>5J</u>	<u>4H</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Laborer	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Machinist	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Operating Engineer	\$45.06	<u>7Y</u>	<u>4K</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Painter	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Pipefitter	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Rigger	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Sheet Metal	\$46.15	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Shipwright	\$44.95	<u>7X</u>	<u>4J</u>		<u>View</u>
King	Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	\$45.06	<u>7Y</u>	<u>4K</u>		<u>View</u>
King	Sign Makers & Installers (Electrical)	Journey Level	\$50.90	<u>0</u>	1		<u>View</u>
King	Sign Makers & Installers (Non-Electrical)	Journey Level	\$31.52	<u>0</u>	1		<u>View</u>
King	Soft Floor Layers	Journey Level	\$51.07	<u>5A</u>	<u>3J</u>		View
King	Solar Controls For Windows	Journey Level	\$12.44		<u>1</u>		<u>View</u>
King	Sprinkler Fitters (Fire Protection)	Journey Level	\$81.39	<u>5C</u>	<u>1X</u>		<u>View</u>
King	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		1		<u>View</u>
King	Stone Masons	Journey Level	\$58.82	<u>5A</u>	<u>1M</u>		<u>View</u>
King	Street And Parking Lot Sweeper Workers	Journey Level	\$19.09		1		<u>View</u>
King	Surveyors	Assistant Construction Site Surveyor	\$62.71	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Surveyors	Assistant Construction Site Surveyor	\$62.71	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	<u>Surveyors</u>	Chainman	\$58.93	<u>7A</u>	<u>3C</u>	<u>8P</u>	<u>View</u>
King	<u>Surveyors</u>	Construction Site Surveyor	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
King	Telecommunication Technicians	Journey Level	\$51.07	<u>7E</u>	<u>1E</u>		<u>View</u>
King	Telephone Line Construction - Outside	Cable Splicer	\$41.81	<u>5A</u>	<u>2B</u>		<u>View</u>

King	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$23.53	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Installer (Repairer)	\$40.09	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Special Aparatus Installer I	\$41.81	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Special Apparatus Installer	\$40.99	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$41.81	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$38.92	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Telephone Lineperson	\$38.92	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Television Groundperson	\$22.32	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Television Lineperson/Installer	\$29.60	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Television System Technician	\$35.20	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Television Technician	\$31.67	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Telephone Line Construction - Outside	Tree Trimmer	\$38.92	<u>5A</u>	<u>2B</u>		<u>View</u>
King	Terrazzo Workers	Journey Level	\$54.06	<u>5A</u>	<u>1M</u>		<u>View</u>
King	<u>Tile Setters</u>	Journey Level	\$54.06	<u>5A</u>	<u>1M</u>		<u>View</u>
King	Tile, Marble & Terrazzo Finishers	Finisher	\$44.89	<u>5A</u>	<u>1B</u>		<u>View</u>
King	Traffic Control Stripers	Journey Level	\$47.68	<u>7A</u>	<u>1K</u>		<u>View</u>
King	Truck Drivers	Asphalt Mix Over 16 Yards	\$61.59	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	\$61.59	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Asphalt Mix To 16 Yards	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Asphalt Mix To 16 Yards (W. WA-Joint Council 28)	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Dump Truck	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Dump Truck & Trailer	\$61.59	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Dump Truck & Trailer	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Dump Truck (W. WA-Joint Council 28)	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Other Trucks	\$61.59	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers	Other Trucks (W. WA- Joint Council 28)	\$61.59	<u>5D</u>	<u>4Y</u>	<u>8L</u>	View
King	Truck Drivers	Other Trucks (W. WA- Joint Council 28)	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Truck Drivers - Ready Mix	Dump Trucks, side end and bottom dump, including semi-trucks and	\$60.75	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>

		trains or combinations thereof: Less than 16 yd. capacity					
King	Truck Drivers - Ready Mix	Transit Mix	\$61.59	<u>5D</u>	<u>4Y</u>	<u>8L</u>	<u>View</u>
King	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.71		<u>1</u>		<u>View</u>
King	Well Drillers & Irrigation Pump Installers	Oiler	\$12.97		<u>1</u>		<u>View</u>
King	Well Drillers & Irrigation Pump Installers	Well Driller	\$18.00		<u>1</u>		<u>View</u>

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# **Overtime Codes**

**Overtime calculations** are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

- 1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
  - B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
  - G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a fourten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.
  - J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.
  - K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
  - M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

# **Overtime Codes Continued**

- 1. O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.
  - P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
  - Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.
  - R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.
  - S. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays and all other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
  - U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
  - V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.
  - W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
  - X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
  - Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
  - Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

## **Overtime Codes Continued**

- 2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
  - B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
  - C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two times the hourly rate of wage.
  - F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
  - G. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
  - H. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
  - O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.
  - R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
  - U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.
  - W. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a four-day, tenhour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on holidays shall be paid at double the hourly rate of wage.
- 3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
  - A. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar (\$1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
  - C. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays shall be paid at double the hourly rate of wage. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

#### **Overtime Codes Continued**

- 3. E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.
  - F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
  - H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.
  - J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

- 4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
  - A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.
  - B. All hours worked over twelve (12) hours per day and all hours worked on holidays shall be paid at double the hourly rate of wage.
  - C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

## **Overtime Codes Continued**

4. D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

#### **EXCEPTION:**

On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

4. E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

- F. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- H. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

- 4. M. All hours worked on Sunday and Holidays shall be paid at double the hourly rate. Any employee reporting to work less than nine (9) hours from their previous quitting time shall be paid for such time at time and one-half times the hourly rate.
  - N. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays, and all work performed between the hours of midnight (12:00 AM) and eight AM (8:00 AM) every day shall be paid at double the hourly rate of wage.
  - O. All hours worked between midnight Friday to midnight Sunday shall be paid at one and one-half the hourly rate of wage. After an employee has worked in excess of eight (8) continuous hours in any one or more calendar days, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of six (6) hours or more. All hours worked on Holidays shall be paid at double the hourly rate of wage.
  - P. All hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage.
  - Q. The first four (4) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday shall be paid at double the hourly rate. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - R. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - S. All hours worked on Saturdays and Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.
  - T. The first two (2) hours of overtime for hours worked Monday-Friday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. For work on Saturday which is scheduled prior to the end of shift on Friday, the first six (6) hours work shall be paid at one and one-half times the hourly rate of wage, and all hours over (6) shall be paid double the hourly rate of wage. For work on Saturday which was assigned following the close of shift on Friday, all work shall be paid at double the hourly rate of wage.
  - U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - V. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established or outside the normal shift (5 am to 6pm), and all work on Saturdays, except for make-up days shall be paid at time and one-half ( $1\frac{1}{2}$ ) the straight time rate.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

4. W. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

#### **Holiday Codes**

- 5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
  - B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).
  - C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
  - D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
  - H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).
  - I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
  - J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).
  - K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

- 5. L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).
  - N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).
  - P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.
  - Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
  - R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).
  - S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).
  - T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).
  - Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

# **Holiday Codes Continued**

- 6. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
  - E. Paid Holidays: New Year's Day, Day Before Or After New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and a Half-Day On Christmas Eve Day. (9 1/2).
  - G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
  - H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).
  - I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).
  - T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).
  - Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

- 7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
  - B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
  - H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

- 7. L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.
  - P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
  - Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
  - R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
  - S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
  - T. Paid Holidays: New Year's Day, the Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and The Day after or before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
  - V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
  - W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.
  - X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken

on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

- 7. Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.
  - Z. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

# **Holiday Codes Continued**

- 15. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day. (8) Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
  - B. Holidays: New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. (9)
  - C. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day. (8)
  - D. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, and the day after Christmas.
  - E. Holidays: the day before New Years's Day, New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day. (12)

# **Note Codes**

- 8. D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
  - L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
  - M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: \$1.00, Levels C & D: \$0.50.
  - N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
  - P. Workers on hazmat projects receive additional hourly premiums as follows -Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, And Class D Suit \$0.50.
  - Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

- 8. S. Effective August 31, 2012 A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
  - T. Effective August 31, 2012 A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
  - U. Workers on hazmat projects receive additional hourly premiums as follows Class A Suit: \$2.00, Class B Suit: \$1.50, And Class C Suit: \$1.00. Workers performing underground work receive an additional \$0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional \$0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional \$0.50 per hour.
  - V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.

- W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.
- X. Workers on hazmat projects receive additional hourly premiums as follows Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, and Class D Suit: \$0.50. Special Shift Premium: Basic hourly rate plus \$2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

8. Z. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

## **Note Codes Continued**

9. A. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid \$0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

- (A) -130' to 199' -\$0.50 per hour over their classification rate.
- (B) -200' to 299' -\$0.80 per hour over their classification rate.
- (C) -300' and over -\$1.00 per hour over their classification rate.
- B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

# Washington State Department of Labor and Industries Policy Statement (Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

- 1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.
- 2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.
- 3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.
- 4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.
- 5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.
- 6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

# WSDOT's Predetermined List for Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		x
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		Х
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		x
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

ITEM DESCRIPTION

YES

NO

	ITEM DESCRIPTION	YES	NO
17.	Precast Concrete Inlet - with adjustment sections,		
	See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		x
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		x
22.	Vault Risers - For use with Valve Vaults and Utilities  X Vaults.		x
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		x
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	x	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	x	

ITEM DESCRIPTION

**YES** 

NO

**YES** 

52.

Irrigation components

X

	ITEM DESCRIPTION	YES	NO
53.	Fencing materials		X
54.	Guide Posts		X
55.	Traffic Buttons		X
56.	Ероху		X
57.	Cribbing		X
58.	Water distribution materials		X
59.	Steel "H" piles		X
60.	Steel pipe for concrete pile casings		X
61.	Steel pile tips, standard		X
62.	Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

#### See RCW <u>39.12</u>.010

(The definition of "locality" in RCW 39.12.010(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

## WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.

The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.

When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators Underground Sewer & Water
- Residential \*\*\* ALL ASSOCIATED RATES \*\*\*
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

## Washington State Department of Labor and Industries Policy Statements (Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

#### WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

- (1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.
- (2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:
- (a) They deliver or discharge any of the above-listed materials to a public works project site:
- (i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or
  - (ii) At multiple points at the project; or
  - (iii) Adjacent to the location and coordinated with the incorporation of those materials.
- (b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.
- (c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).
- (d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.
- (e) They deliver concrete to a public works site regardless of the method of incorporation.
- (f) They assist or participate in the incorporation of any materials into the public works project.

- (3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.
- (4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.
- (a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.
- (b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.
- (5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

# APPENDIX B Standard Plans and Details

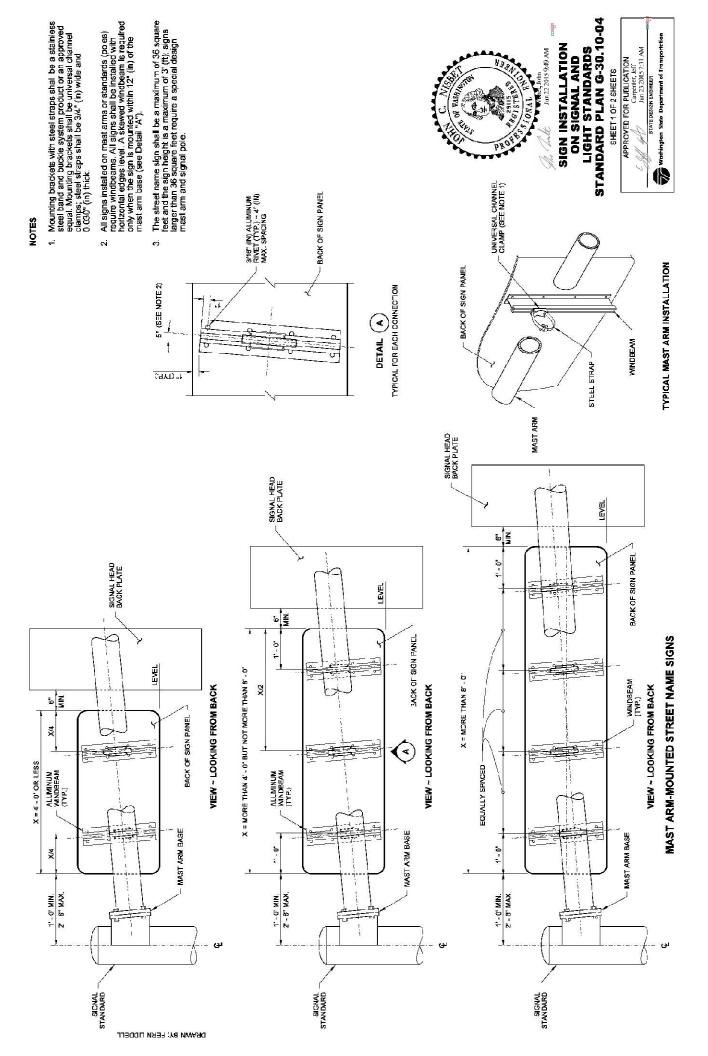


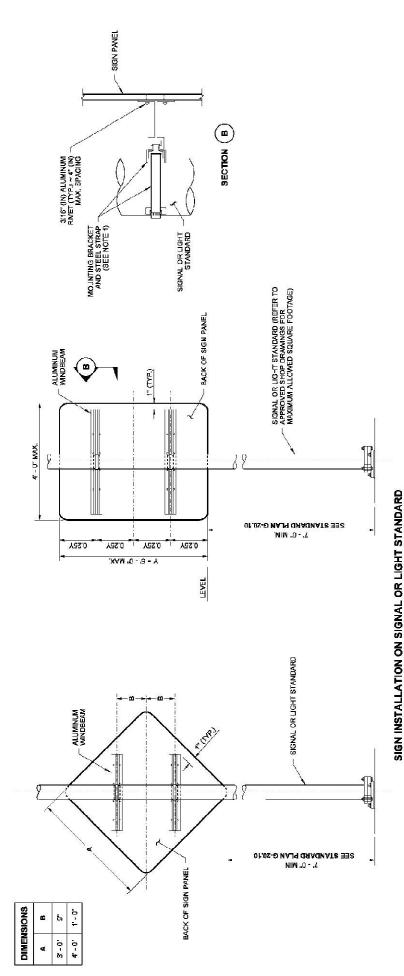
### **List of Standard Details**

#### WSDOT STANDARD DETAILS

Sign Installation on Signal and Light Standards	. G-30.10-04
Signal Head Mounting Details ~ Mast Arm and Span Wire Mountings	J-75.20-01





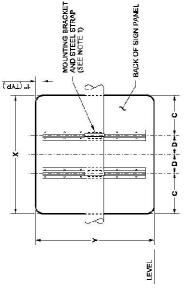


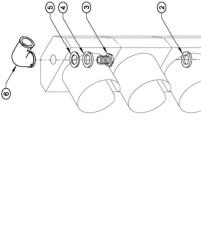


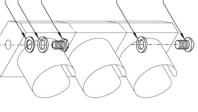
APPROVED FOR PUBLICATION
Carponer, Leff
Jun 232015 7:31 AM

份

# DIMENSIONS







ARM MOUNT TYPE L (1) END CAP
(2) 112" (IN) DIAM. CONDUIT LOCKNUT
(3) 112" (IN) DIAM. CHASE NIPLE
(4) STEEL WASHER
(5) NEOPREN GASKET
(6) ROPINE STERATED ELI FITING WITH:
(7) STEEL WASHER STREEL THROUGH BOLT AND NUTS
(7) THREE STANLESS STEEL THROUGH BOLT AND NUTS
(7) THREE STANLESS STEEL STEEWS AT

Θ

- SLIPFITTER CONNECTION

   THREE ALLEN HEAD STAINLESS STEEL SET SCREWS
  AT CONDUIT NIPPLE CONNECTION
- SERRATED RING WITH PINS
- HEX LOCKNUT WITH:

   TWO ALLEN HEAD STAINLESS STEEL SET SCREWS

   PIN RECEPTACLES (F)(G)

ARM MOUNT TYPE LE

- (9) 11/2" (N) DIAM, CONDUIT NIPPLE
  (10) 11/2" (N) DIAM HEX LOCKNUT
  (11) MOUNTING ASSEMBLY
  (2) BROAZE ELEVATOR PLUMBIZER WITH 3/8" (N) STAINLESS STEEL
  THROUGH BOLT, WASHERS, AND TWO NUTS
- (i) ALUMINIUM ARM WITH SET SCREW
  (4) SLOTTED TUBE WITH CLOSURE STRIP
  (5) 2 17" (IN) I.D. MIN TUBE CLAMP
  (6) INTERNALLY THREADED CLAMP ASSEMBLY WITH:

   1700 SET SCREWS
   17" (IN) + COMP (IN) STAINLESS STEEL BANDS
   711° (IN) SCREW BUCKLES WITH SWAPELS, NUTS, AND WASHERS
   BAND CLIPS WITH ALLEN HEAD STAINLESS STEEL SET SCREWS

٦ 6

4

- (1) BRONZE MESSENGER HANGER WITH:
  - 1/2" (IN) DIAM. J-BOLTS CABLE LOCK BAR

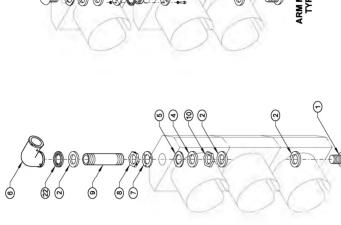
  - RIVETCOTTER KEY
- BRONZE INTERNALLY THREADED WIRE ENTRANCE WITH: BUSHING INSERT OR RUBBER GROMMET
   ALLEN HEAD STAINLESS STEEL SET SCREW

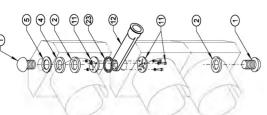
(2)

(2)

- (19) BROWZE BALANCE ADJUSTER (WHERE REQUIRED)
  (20) MULTI-HEAD MOUNTING ASSEMBLY
  (22) LOWER ARM ASSEMBLY
  (23) SERRATED RING WITH NO PINS
  (23) SERRATED WASHER
  (24) 11/2" (IN) DIAM. SERRATED OR FLANGED ELBOW
  (25) CENTER SUPPORT WITH 11/2" (IN) DIAM. HUBS WITH COVER AND GASKET
  (26) 11/2" (IN) DIAM. SERRATED COUPLING
  (27) 11/2" (IN) BREAKAWAY TETHER ASSEMBLY
  WITH OPTIONAL EXTENDER BAR

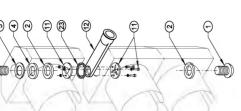
  - - 28 SERRATED CROSS





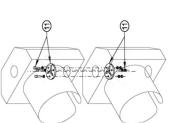
(8)

**₽** 









HOUSING FIXTURE CONNECTION DETAIL

ARM MOUNT TYPE N

- Type M mounting shall have "O" ring groove and seal on top and bottom of signal attachment.
- Type M mounting for conventional heads shall have a 2" (in) diameter opening at the signal attachment. 'n
  - Type M mounting for optically programmed heads shall have a 3 1/2" (in) diameter opening at the signal attachment. က

4 (%) **(E)** (3) (2)

6

- Type N mounting with optically programmed heads shall be installed with 14" (in) nominal arms.
- See Standard Plan J-75.30 for tether wire and backplate requirements.

5

- Apply bead of silicone around the perimeter of all top end cap openings prior to installation of the end cap assembly. 6
- See Standard Specification 9-29.16 for backplate requirements. Where required, prismatic sheeting shall be applied in accordance with the manufacturer's recommendations. The application degreased with isopropyl alcohol, and dried prior surface of the backplate shall be cleaned to application of the sheeting. 7
- signal assembly. When signal display assembly is mounted horizontally, drill a 14th (in) drain hole at the lowest point of each section of the signal assembly. Drill a 1/4" (in) drain hole in the bottom of each œί

6 4 (P) (0)

NOTE: BACKPLATES NOT SHOWN FOR CLARITY

Θ

0 Θ



STANDARD PLAN J-75.20-01 SIGNAL HEAD MOUNTING DETAILS ~ MAST ARM AND SPAN WIRE MOUNTINGS

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 10 2015 7:18 AM Washington State Department of Transpo STATE DESIGN ENGINEER 

DRAWN BY: COLBY FLETCHER

